MESSAGE FROM THE PRESIDENT

CERRITOS COMMUNITY COLLEGE DISTRICT ADMINISTRATION

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Vice President of Academic Affairs/Provost
Vacant
Vice President of Business Services/Assistant Superintendent
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Student Member

Dear Cerritos College Student:

Writing this message to you for the 2001 – 2002 Cerritos College catalog, I am struck by the fact that you and I need to look at this catalog in very much the same way. As someone who is new to Cerritos College, I am using the catalog to help me get a sense of the college to better understand who we are and what we are about. As a student, especially as a new student, you too can use the catalog to help you understand and make sense out of the college. You can do that because this catalog tells you just about everything you need to know about Cerritos College. You can find the policies and procedures, the rules and regulations that govern all of us. You can find all the different programs in which you may be interested, and all the different majors from which you can select. You can read a description of every course that the college offers and see which courses you will need to earn your Certificate of Achievement, your Associate's degree or to transfer to the university. And you can learn about the Cerritos College faculty, who they are, how long they have been at the college and where they earned their degrees. Knowing all of that can help you make better decisions and to be more successful as a student.

My hope is that you will in fact use this catalog, and all of the other resources that Cerritos College has to offer to have a truly successful college career.

Jane M. Harmon, Ph.D.
President

Mensaje del presidente

Respetable estudiante de Cerritos College:

Al escribirle este mensaje a usted en el catálogo del término escolar 2001 – 2002 de Cerritos College, me asombro al darme cuenta que, tanto usted como yo, tenemos que aproximarnos a este catálogo con fines muy similares. Como cualquier persona que es recién ingresada a Cerritos College, me valgo de este catálogo para que me ayude a ubicarme y a mejor entender quiénes somos y qué rol desempeñamos. Ud. como estudiante, especialmente como estudiante recién ingresado, también puede hacer uso del catálogo para ayudarse a entender y a adaptarse a un nuevo plantel educativo. Ud. puede lograrlo ya que este catálogo le informa acerca de todo lo que necesita saber sobre Cerritos College. Ud. puede encontrar información importante como las normas y sus procedimientos, las reglas y/o los reglamentos que nos rigen a todos. Ud. puede encontrar todos los diferentes programas que hay, de los cuales usted puede interesarse en alguno. Además puede encontrar todo lo pertinente a las diferentes especialidades de las que usted puede seleccionar. Ud. encontrará una descripción de cada curso que el colegio ofrece y ver qué clases necesitará para completar su Certificate of Achievement, su Associate's Degree o para transferirse a una universidad. Ud. también puede informarse acerca del profesorado de Cerritos College, quiénes son, cuánto tiempo han enseñado en el colegio y de dónde se han graduado. Al saber básicamente lo anterior sugerido, Ud. podrá tomar mejores decisiones y a la vez tendrá más éxito como estudiante.

Mi interés es que aproveche la información de este catálogo y todas las demás fuentes de información que Cerritos College tiene para ofrecerle, ya que son principalmente para que usted tenga una carrera verdaderamente exitosa.

Jane M. Harmon, Ph.D.
Presidente
CERRITOS COLLEGE
GENERAL CATALOG
AND ANNOUNCEMENT
OF COURSES
ACADEMIC YEAR 2001-2002

CERRITOS COLLEGE
11110 ALONDRA BOULEVARD,
NORWALK, CALIFORNIA 90650
(562) 860-2451
http://www.cerritos.edu

CERRITOS COLLEGE
A PUBLIC COMMUNITY COLLEGE
ESTABLISHED 1955

Serving the residents of Artesia, Bellflower, Cerritos, Downey,
Hawaiian Gardens, Lakewood, La Mirada and Norwalk.

ACCREDITED BY:
Accrediting Commission for Community and Junior Colleges of the
Western Association of Schools and Colleges
Mendocino Avenue, Santa Rosa, CA 95403
(707) 569-9177

APPROVED BY:
California Community College Board of Governors
Immigration and Naturalization Service of the
U.S. Department of Justice
State Department of Education for Veterans Benefits
United States Department of Education

A MEMBER OF:
Academic Senate for California Community Colleges
Association of Community College Trustees
California Community Colleges Trustee
California Association of Community Colleges
Cerritos Area Trustees and Administrators Association
College Association for Public Events and Services
School Employers Association
Southern California Consortium for Community College Television
It is the policy of the Cerritos Community College District that, unless specifically exempted by statute, every course, course section or class, the attendance of which is to be reported for state aid, wherever offered and maintained by the district, shall be fully open to enrollment and participation by any person who has been admitted to the college and who meets such prerequisites as may be established pursuant to Title 5 of the California Administrative Code, commencing with Section 51006.

All announcements herein are subject to revision. Changes may be made subsequent to the date of publication.
2001-2002 ACADEMIC CALENDAR*

FALL SEMESTER 2001

Touchtone Registration ..................... July 12-August 10,2001
Late Registration ........................... August 13-31,2001
Instruction Begins .......................... August 13,2001
Final Examinations ....................... December 7-13,2001
Fall Semester Ends ......................... December 13,2001

SPRING SEMESTER 2002

Touchtone Registration ..................... November 29-January 31,2002
Late Registration ........................... January 7-31,2002
Instruction Begins .......................... January 7,2002
Final Examinations ....................... May 10-16,2002
Spring Semester Ends ..................... May 16,2002
Commencement ............................. May 11,2002

HOLIDAYS (THE COLLEGE WILL BE CLOSED)

Independence Day ......................... July 4,2001
Labor Day ................................. September 1-3,2001
Veterans Day Observance ................ November 12,2001
Thanksgiving Holiday ..................... November 22-24,2001
Christmas Eve ............................. December 24,2001
Christmas Day ............................. December 25,2001
New Year’s Eve ............................. December 31,2001
New Year’s Day ............................. January 1,2002
Dr. Martin Luther King's Birthday Observance .... January 21,2002
Lincoln’s Birthday Observance ............ February 15,2002
Washington's Birthday Observance ........ February 18,2002
Good Friday ............................... March 29,2002
Memorial Day .............................. May 27,2002

RECESS

Semester Break ......................... December 14,2001-January 4,2002
Spring Recess ............................. March 25-29,2002

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

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

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### AREAS OF INTEREST

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BOARD OF TRUSTEES
President ........................................ Mrs. Cheryl Epple
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President/Superintendent ..................... Dr. Jane M. Harmon
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Vice President of Business Services/
   Assistant Superintendent .................... Dr. Pamela Walker
Vice President of Student Services/
   Assistant Superintendent ................... Dr. Erlinda Martinez
Dean of Public Affairs ........................ Dr. Steven Helfgot
Dean of Academic Affairs .................... Dr. Adolph Johnson, Jr.
Dean of the Library and Learning ........... Dr. Adolph Johnson, Jr.
Resource Center ............................... Mr. John J. McGinnis
Executive Dean of Community, Industry and
   Technology Education ...................... Mr. Nick Kremer
Executive Dean of Information Technology and
   Development ................................ Mr. John Grindel
Executive Director of Foundation ............ Mr. Steven Richardson
Associate Dean of Student Activities ......... Mr. Phillip Houseman
Instructional Dean/Business Education ...... Mr. William C. Christie
Instructional Dean/Health Occupations ...... Ms. Jenine Nolan
Interim Instructional Dean/Humanities and
   Social Sciences ............................. Ms. Francine DeFrance
Instructional Dean/Fine Arts/Communications Dr. Barry Russell
Instructional Dean/Liberal Arts ................ Ms. Donna Miller
Instructional Dean/HPER/Athletics .......... Dr. Pamela Walker
Instructional Dean/Science, Engineering and
   Mathematics ............................... Mr. Norman Fujimoto
Instructional Dean/Technology ............... Dr. Randy W. Peebles
Coordinator of Foster Care Program .. Ms. Carol Karian

COMMUNITY EDUCATION
Director of Community Education ........ Ms. Ginger Neel
Director of Adult Education/
   Diversity Programs ......................... Ms. Graciela Vasquez

COMPUTER SERVICES
Director of Computer Services ............... Ms. Lee Krichmar

FACILITIES SERVICES
Director of Operations ........................ Mr. Wayne Nunnery
Director of Physical Plant ..................... Mr. Mike Sebak

STUDENT SERVICES
Administrative Dean of Admissions and Records ... Mrs. Carol Patrick
Administrative Dean of Career Services ........ Ms. Theresa Lopez
Chief of Campus Police ........................ Mr. Marvin Engquist
Director of Communication ..................
   Director of Disabled Student Program
   and Services ............................... Dr. Robert Hughlett
Director of Counseling ...................... Mr. Robert Chester
Director of Marketing/Public Relations ...... Mr. Chi-Chung Keung
Coordinator of Health and Wellness .......... Mr. Charles Gale
Coordinator of International Students Program Ms. Danita Kurtz
Coordinator of Judicial Affairs ............. Mr. Pat Callahan
Coordinator of Student Activities .......... Mr. Dean Ackland
CalWorks Coordinator ........................ Ms. Renee Chomiak
Web Administrator ........................... Mr. Taylor Bowman

FACULTY SENATE
Faculty Senate President ........................ Mr. Robert Chester

CALIFORNIA SCHOOL EMPLOYEES ASSOCIATION
CSEA President ............................... Mr. Ed White
History

Cerritos College was established on June 10, 1955 when citizens of the Bellflower, Norwalk, Artesia, Carmenita, and Bloomfield elementary districts voted four to one in favor of forming a junior college district. On September 27, 1955, a ballot measure calling for a six-million-dollar bond issue with which 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.

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.

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 $500,000,000. 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 $543,000,000. The 18 buildings were complemented by a weight lifting facility in 1971 and a Student Activities/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 program, which had a strong foundation. Innovation in satellite courses, televised instruction, open entry/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 $800,000,000.

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The early 1970's were marked by spiraling inflation and tighter money; yet the College was able to finance 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.

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

Over the last few years, the College has undergone five major renovations. In 1994, the 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. And the old card catalog was replaced with an automated on-line system as a result of a major financial gift by the Associated Students of Cerritos College (ASCC). A modern teleconference center and learning assistance lab were added to the east wing of the Learning Resource Center.

The Student Center was renovated in 1995, funded by a three-way partnership between the ASCC, the College District and the State. Unchanged since its doors first opened, The Student Center was completely remodeled from the main floor to the adjacent Culinary Arts food service. 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 Pentium computers, designed to provide instant 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 (LRC) opened, 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, the Internet for students 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.

And 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 is 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. And 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).

More students transfer to Cerritos College than any other California community college, according to the Chancellor’s Office of California Community Colleges.

Cerritos College is highly diverse. Across the nation, it is the fourth largest Hispanic serving community college. Furthermore, it is home to more than 300 international students representing 34 countries.

Cerritos College now serves the communities of Artesia, Bellflower, Cerritos, Downey, Hawaiian Gardens, Lakewood, La Mirada, and Norwalk with a combined population of more than 450,000 and an assessed valuation exceeding one billion dollars.
**Vision**

Cerritos College, as an institution of higher education, is:
Dedicated to excellence in teaching and learning;
Committed to meeting diverse student needs;
United with the community to serve our students' education,
career, and life-long learning needs.

**Mission**

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. We provide a technologically advanced educational community in which students pursue a variety of educational goals: attainment of an associate's degree, transfer to a four-year university, vocational degree or certificate, or job skills. Achievement of these goals is strongly supported with instruction in basic skills as well as with student and instructional support services. Beyond these college credit programs and services, Cerritos College actively enriches the surrounding community through its varied community education programs.

**Philosophy and Objectives**

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

Admission to Cerritos College is open to any high school graduate or equivalent or persons eighteen years of age or older. 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 must pay non-resident tuition.

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

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

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

APPLICATION

All students desiring admission to Cerritos College must file an application for admission in the Office of Admissions and Records providing complete and accurate information as requested.

An applicant is not at liberty to ignore previous enrollment at any post-secondary institution. Failure to list any school, college or university which applicant previously attended or any deliberate falsification of information on application or residence verification is a basis for dismissal from the College.

Applicants should submit applications and transcripts well in advance of the beginning date of the session for which they wish to be admitted.

Upon the clearance of all admission papers, a student identification (I.D.) number is issued by the Office of Admissions and Records. An I.D. number is necessary before the student is eligible for enrollment, assessment battery testing, or counseling appointment. Students on academic probation may be limited as to number of units and/or hours of enrollment. Appointments to register are issued by the Office of Admissions and Records.

TRANSCRIPTS

If an applicant has enrolled in any other post-secondary institution before applying to Cerritos College, a transcript of record showing all work undertaken is required. All transcripts submitted become the permanent property of Cerritos College.

NON-HIGH SCHOOL GRADUATE

A person eighteen years of age or older who has not received a high school diploma may be admitted to the College for the purposes of general education, a specialized vocational program, or qualification to a state college.

Any individual eighteen years of age or older who wishes to obtain a high school diploma by taking courses at Cerritos College should proceed as follows:
1. Obtain a statement of approval from the principal (or counselor) of the high school that is to issue the diploma. The statement should indicate:
   a. The subjects and number of semester credits necessary for completion of the graduation requirements.
   b. The Cerritos College courses which will satisfy the high school requirements.
2. Upon completion of the college courses, a transcript of the student's record should be requested to be sent to the high school.

Degree applicable college courses taken to meet high school graduation requirements will be counted as part of the 60 units of credit required for the Associate in Arts Degree at Cerritos College.

ADMISSION OF HIGH SCHOOL STUDENTS (VEYSEY PROGRAM)

The Veysey program represents a cooperative venture between Cerritos College and its neighboring high schools. Under the terms of this program, juniors and seniors at least 16 years of age may take college courses to achieve three important purposes:
1. Advanced academic work: High school students can get a head-start in their college major or in completing college graduation requirements.
2. Vocational-technical career courses: Students can take courses not available in a high school or can obtain advanced work beyond the scope of a high school's vocational program.
3. "Bridging the Gap:" Students can become familiar with college work and college procedures while still at the high school.

Upon recommendation of the high school and with parental consent, high school juniors and seniors may take classes at Cerritos College. High school students may enroll in courses and possibly receive both high school and college credit, but must also attend a minimum day at the high school. Enrollment in the summer session immediately prior to the junior year is also open to high school students. No enrollment fee (with the exception of health and student I.D fees) will be charged to concurrently enrolled high school students. Interested students should contact their high school counseling office or the Cerritos College School Relations Office at (562) 860-2451, Ext. 2130 for more information.

Cerritos College also offers college credit courses on several local high school campuses through the College Bound Program. Contact your high school counselor to see if and when courses are being offered at your high school. Students who need accommodations due to a disability should make arrangements for these through their K-12 school district, in consultation with the DSP&S office at Cerritos College.

ADMISSION OF MINORS

The College may admit as a (non-Veysey eligible) part-time or full-time student in grades kindergarten through 10 (K-10) an advanced student who, in the opinion of the Dean of Academic Affairs and designated faculty and staff, may benefit from instruction to be taken. This is not a remediation program. For example, if a student fails or does poorly in a particular course(s) at his/her school, Cerritos College is not an alternative institution through which deficiencies can be made up. The minors program for under-aged students is for advanced students who desire to take courses that are not available at their schools.

Students applying for admittance must meet the following criteria:
1. Submit an application for admission to Cerritos College, and;
2. Submit a completed special minors application form;
3. Enroll in 12 units or fewer, and;
4. Demonstrate the ability to benefit from more advanced scholastic or vocational work than is available in the K-10 setting as determined by the Dean of Academic Affairs and designated faculty and staff, and;
5. Be authorized to attend Cerritos College by the Public School District if the student attends public school;
6. Undertake courses of instruction of a scope and duration sufficient to satisfy the requirement of law;
7. Minor students must submit a completed Permission Letter for Special Minor Students (application only) each term or semester they wish to attend Cerritos College.
8. Veysey students and underaged minors are exempt from per unit fees. Students who need accommodations due to a disability should make arrangements for these through their K-12 school district, in consultation with the DSP&S office at Cerritos College.

ADMISSION OF INTERNATIONAL STUDENTS

The International Student Center at Cerritos College welcomes international students from around the world. We are dedicated to providing the services that will assist international students in achieving their academic goals. International applicants should start the application process at the earliest possible date prior to the beginning of any college semester. Three months is recommended to ensure enrollment.

Documentation required:
• Application for admission (with $25 non refundable fee)
• The following financial documentation from the financial sponsor: (International students are not usually eligible for financial assistance or employment.)
  • Statement of support (notarized by a notary public or government official)
  • Bank certification from financial sponsor’s bank showing sufficient funds
• Proof of English Proficiency
  • TOEFL (450 or higher on the paper and pencil test or 133 or higher on the computerized test)
  • Passing score on the ESL Assessment Test (for transfer students and applicants currently in the United States.)
• TB exam report
• High school and College transcripts
• Transfer Authorization (from the previous school within the U.S.)
• Health and Accident Insurance
• All immigration documentation (I-20’s, I-94 cards, valid passport, etc.)
• Application fee $25.00
• Tuition and enrollment fee ($157.00 per unit) 4,710.00
• Books and supplies 1,600.00
• Student Health Fee 24.00
• College student ID Fee 20.00
• Health Insurance (mandatory) 540.00
• Living expenses (Approx.) 10,840.00
• Parking permit (optional if you have a vehicle) 40.00

Costs: Approximate fees and accommodations for one year:

<table>
<thead>
<tr>
<th>Subject to change</th>
<th>Approx. total for the year:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Application fee</td>
<td>$25.00</td>
</tr>
<tr>
<td>• Tuition and enrollment fee ($157.00 per unit)</td>
<td>4,710.00</td>
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<tr>
<td>• Living expenses (Approx.)</td>
<td>10,840.00</td>
</tr>
<tr>
<td>• Parking permit (optional if you have a vehicle)</td>
<td>40.00</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$17,795.00</strong></td>
</tr>
<tr>
<td>Approx. tuition fees per semester based on 12 units:</td>
<td>$1,884.00</td>
</tr>
</tbody>
</table>

Expenses

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

STUDENT FEES

1. Enrollment fees for the community college student is $11 per unit. FEES ARE SUBJECT TO CHANGE WITHOUT NOTICE DUE TO STATE LEGISLATION.

2. Students who are non-residents of California will also be subject to non-resident tuition fee of $134 per unit. International student fee is $146 per unit. PAYABLE AT TIME OF REGISTRATION. Active military personnel and their dependents are exempt for one year from this out-of-state tuition charge. Non-resident students who have been admitted to a class or classes without payment of the fee because of falsification of information submitted by or for them, shall be subject to dismissal from college. If the above fees are not paid during the same day of registration, your complete program will be dropped and you will have to re-register.

3. Student Health Fee is $10.00 per semester, $7.00 for Summer Session.

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

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

Required Instructional and Other Materials

Policy

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

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

REFUND POLICIES AND PROCEDURES

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

a. classes are dropped by the required deadline;

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

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

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

The above listed eligible students may file a petition with the district requesting refund of their registration fee(s). A refund will not be processed if academic credit has been awarded for the class. Refunds will be mailed after your application is filed at the Payroll/Fee Station in the Administration Building. Be sure your address is correct at the time you file. To an officially withdrawn student, the following refund guidelines apply:
1. **Enrollment Fee, Non-Resident Tuition, and International Student Tuition** - Fall and Spring Semester, Summer Session and Short-Term Classes - A student will be fully refunded if classes are dropped within the drop dates published in the Schedule of Classes. There are no exceptions to the published drop dates.

2. **Student Health Fee** - A student will be fully refunded if all classes are dropped within the drop dates published in the Schedule of Classes. There are no exceptions to the published drop dates.

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

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

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

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

**INSTRUCTIONAL MATERIALS FEES**

In accordance with Title 5, Section 59404 (b), Cerritos College may require students to provide materials that are course related, including, but not limited to, textbooks, tools, equipment and clothing. Such materials will be required if:

1. The instructional or materials are used in the production of a course-related project or "end product" that has continuing value to the student outside of the classroom setting; or
2. The instructional or other materials required for the class have a continuing value to the student outside of the classroom setting.

**Bad Check Regulations**

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

**Failure to Pay College Financial Obligations**

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

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

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

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

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

**Incidental**

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

Matriculation is a process which is 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 through 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 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.
• Failure to comply with matriculation regulations, declaring an educational goal and developing an educational plan may result in the termination of matriculation services to the student.

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

ADMISSIONS
Complete and submit the Cerritos College admissions application to the Admissions and Records Office, located in the Administration Building or on the college web site. Submit high school transcripts and any previous college transcripts of work you have completed. Submit proof of residency requirements.
EXEMPTIONS: none.

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

ASSESSMENT
The Career Services Center offers the following services to assist students in exploring and planning their academic and vocational futures:
(1) Assessment Testing,
(2) CalWORKs,
(3) Career Planning,
(4) Student Employment-Job Placement, and
(5) Re-entry Program
The Career Services Center is located in the Administration Building.
"ASSESSMENT" means the process of gathering information about an individual student to facilitate his or her success. At Cerritos College, assessment includes, but is not limited to, the collection of information regarding student’s study skills, English language proficiency, computational skills, high school and/or college transcript review, evidence of A.A. degree or higher from an accredited institution, learning skills, academic performance, and need for special services. In addition, career assessment is the opportunity to explore career aspirations, goals, skills, interests, aptitudes and values.

Do I Need to Take an Assessment Test?
If you plan to enroll in a math, English, ESL (English as a Second Language), or reading class or if you plan to earn an A.A. degree, it is strongly recommended that you take assessment tests prior to registration.

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 Testing Schedule
Copies are available at the Admissions and Records Office, Counseling Office, Career Services Center, and the college website; or call (562) 860-2451, Ext. 2356 for dates and times.

Assessment Test Exemptions
Students who already possess an A.A. degree or higher are not required to take assessment 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 registration.

Individual Assessment Test Battery Exceptions for Course Placement

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

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 registration.

**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 earn required scores on tests can earn college credit for those courses when they come to Cerritos College. For further details, ask a counselor.

A student who scores 3, 4, or 5 on the College Board Advanced Placement Examination will be granted units toward the A.A. degree.

**Chemistry**

Please read the prerequisites and recommendations section with each Chemistry class listing. Be sure that the prerequisites are satisfied before registering for 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 and ESL writing placement exam.

**May I Retake a Test?**

Students are allowed to retake tests using the following schedule:

- **Basic Math Readiness**........... May be repeated one time AFTER one semester waiting period.
- **Intermediate Algebra Readiness**.. May be repeated one time AFTER one semester waiting period.
- **Advanced Math Readiness**........ May be repeated one time AFTER one semester waiting period.
- **Calculus**......................... May be repeated one time AFTER one semester waiting period.
- **Reading**.......................... May be repeated once per semester.
- **Writing and Holistic English**... May be repeated one time AFTER one semester waiting period.
- **Writing Sample**.................. May be repeated one time AFTER one semester waiting period.
- **ESL Writing and CELSA**......... May be repeated one time AFTER one semester waiting period.
- **Assessment Battery**............. May be repeated one time AFTER one semester waiting period.

**Accommodation for Special Needs**

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

**COUNSELING**

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

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

**Follow-up**

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

**What are Prerequisites, Corequisites and Recommendations?**

It is the intent of Cerritos Community College to guide students into courses in which they will have the greatest chance for academic success. Therefore, the student will find courses which have prerequisites, corequisites and/or recommendations in their descriptions. This is the case when a specific body of knowledge or skill(s) must be learned or demonstrated before the student can be expected to successfully progress to the second-level course. For example, ENGL 52 (formerly ENGL 50.2) must be taken before ENGL 100 (formerly ENGL 1). 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.

**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 register for a course. In other words, "prerequisite" means a course that a student is required to complete in order to demonstrate current readiness for enrollment in a course or educational program. The prerequisites offered at Cerritos College are listed with course titles in the "Announcement of Courses" section of the catalog and in the current Schedule of Classes.

2. "Corequisite" means a course that a student is required to take at the same time with another course. For example, if a student enrolls in PHAR 60 (formerly PHAR 10), he/she must take PHAR 40L (formerly PHAR 4) at the same time.

3. "Recommendation" for course preparation means a condition of enrollment that a student is strongly suggested to meet before or along with enrollment in a course or educational program but is not required to do so.

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

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

Sometimes students mistakenly take and successfully pass a particular course before taking its prerequisite. If this happens and the student later wants to take the prerequisite, he or she may be denied admission to that class.

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

Prerequisite may be waived by the institution for students who...
have presented the appropriate reasons and who have the appropriate backgrounds.

If you believe that you can meet the requirements, or that you meet one of the conditions below, then you may challenge a prerequisite. A Prerequisite Challenge Form can be obtained upon request from the Admissions and Records Office, Counseling Center or any division office. The directions for challenging a prerequisite are explained on the form.

It is the student's responsibility to provide information to support the challenge. The challenge must be filed and resolved prior to the student's registration appointment time.

Criteria for challenging a course are:
1. You have the knowledge or the ability to succeed in the course without the prerequisite, or
2. The course which provides the prerequisite is not available, or
3. You believe that the prerequisite is discriminatory or is being applied in a discriminatory manner, or
4. You believe that the prerequisite was established in violation of regulations and/or the established District-approved policy and procedures.

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

Once you have completed the challenge procedure, your challenge will be reviewed by a Prerequisite Challenge Committee, which consists of a member of the appropriate department and the instructional dean. You will be informed in writing of the committee's determination within five (5) working days. If you are dissatisfied with the decision rendered by this body, you may appeal that decision to the Dean of Academic Affairs.

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

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

COUNSELING

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

The counseling service consists of four major functions:
(1) assistance in planning academic programs;
(2) assistance in exploring career possibilities;
(3) consultation regarding personal problems; and
(4) provision of additional auxiliary services, such as personal development classes, articulation with transfer institutions, referrals to outside agencies, orientation classes, and placement interpretation.

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

Although the use of counseling services are 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 registration. 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.

Walk-in counseling is also available. Contact the Advisement Center for hours scheduled for walk-in counseling.

REGISTRATION

Exact registration dates, and registration procedures are contained in the schedule of classes printed for each session.

The registration process is not completed until fees have been paid and the student's program has been validated. No credit is given unless the student has been officially enrolled in the course.

ADMISSION TO CLASS

Students must be officially enrolled before attending any class. Students must attend the first class meeting or their name may be removed from the roll to allow students seeking admission on an availability card to enter. If students are unable to attend the first meeting, the instructor must be notified.

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

AUDITING COURSES

Auditing of courses is permitted at Cerritos College. An auditor is a student who attends a course(s) for no credit. Auditing may be available for any student who wishes to attend a course lecture/lab for information, review purposes or skills building once the instructor's permission is granted.

Students who are accepted in a course on an audit basis are required to pay a fee of $15.00 per unit at the Fiscal Services Fee Station. The audit fee is not refundable to the student. Students who enroll in credit courses for 10 or more semester units shall not be charged a fee to audit three (3) or fewer units per term.

Formal requests to audit cannot be made until the close of registration. Course attendance as an auditor shall be permitted only after students otherwise desiring to enroll in the course for credit toward a degree or certificate have had an opportunity to enroll.

Students auditing are prohibited from changing their enrollment to credit status and the attendance of auditors is not included for purposes of state apportionment.

For additional information regarding auditing, students may make inquiries at the Counseling Office, Academic Affairs Office, Fiscal Services Fee Station, Division Offices or the Office of Admissions and Records.

CHANGE OF PROGRAM

Once the student's official program has been approved and filed with the Office of Admissions and Records and a change in program is necessary, a request for a change of program may be made in the Admissions Office.

STUDY LOAD

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

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

Repetition of Courses

A student may repeat the same course ONLY ONCE for purpose of improving a substandard grade ("D", "F", or "NC"). Only the highest grade and grade points will be counted in computing the student's GPA. For any course repetition in what is otherwise a non-repeatable course, credit and grade points will be counted only once. Students may petition the Academic Records and Standards Committee for exceptions to this policy.

Other courses which are designated in the catalog may be repeated as many times as the catalog indicates.

It is recommended that students see a counselor before repeating any course.

Course repetition regulations as required by Section 58161, Title V, Administrative Code became effective Fall Semester, 1983.

1. State apportionment shall not be allowed for the attendance of a student in a course in which the student has previously received a grade from Cerritos College except under the following conditions:
   a. The student is repeating the course to alleviate substandard work which has been recorded on the student's record. The term "substandard" shall be defined as course work for which the grading symbol "D", "F", or "NC" has been recorded;
   b. The district finds that the student's previous grade is, at
least in part, the result of extenuating circumstances. Extenuating circumstances are verified cases of accidents, illness, or other circumstances beyond the control of the student; or

- The student may repeat such a course for which a grade of "C" or better has been received provided all of the following conditions are met:
  1. The course is a prerequisite for admission to a higher level course or is a prerequisite for entry into a program.
  2. There is a need for review or updating of content or skills.
  3. It has been at least two calendar years since the course was completed. (An exception may be made for that student who was progressing in a special program, discontinued because of extenuating circumstances, and has departmental approval to re-enter the program contingent upon the repeat of specified courses at earliest availability).
  4. Repetition of the course is approved by the counselor prior to registration.

Grades awarded for courses repeated in which a grade of "C" or better was received shall not be counted in calculating a student's grade point average. The attendance of students repeating a course as authorized by the above may be claimed only once for State apportionment.

STATE APPOINTMENT FOR REPEATION OF COURSES MAY BE CLAIMED FOR COURSES IN WHICH COURSE CONTENT DIFFERS EACH TIME IT IS OFFERED, AND THE STUDENT WHO REPEATS IT IS GAINING AN EXPANDED EDUCATIONAL EXPERIENCE FOR ONE OF THE FOLLOWING REASONS:

- Skills or proficiencies are enhanced by supervised repetition and practice within class periods; or
- Active participatory experience in individual study or group assignments is the basic means by which learning objectives are obtained.

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

**PLEASE NOTE:**
A computer system identifies a student who is attempting to repeat a course more than the permitted number of times. A program to check for course repetition is run before the semester begins and again at check points during the first part of the semester. A student attempting to repeat a course which is nonrepeatable under the above guidelines is automatically dropped from the course.

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<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>MAXIMUM UNITS</th>
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<td>AB 50A</td>
<td>Body Trim and Minor Repairs</td>
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</tr>
<tr>
<td>AB 50B</td>
<td>Panel Replacement</td>
<td>1.0 2.0</td>
</tr>
<tr>
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<tr>
<td>PE 225</td>
<td>Swimming, Women</td>
<td>3.0</td>
<td>12.0</td>
</tr>
<tr>
<td>PE 227</td>
<td>Tennis, Men</td>
<td>3.0</td>
<td>12.0</td>
</tr>
<tr>
<td>PE 228</td>
<td>Tennis Conditioning</td>
<td>1.0</td>
<td>4.0</td>
</tr>
<tr>
<td>PE 229</td>
<td>Tennis, Women</td>
<td>3.0</td>
<td>12.0</td>
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<tr>
<td>PE 231</td>
<td>Track &amp; Field, Men</td>
<td>3.0</td>
<td>12.0</td>
</tr>
<tr>
<td>PE 233</td>
<td>Track &amp; Field, Men</td>
<td>3.0</td>
<td>12.0</td>
</tr>
<tr>
<td>PE 234</td>
<td>Track &amp; Field Conditioning</td>
<td>1.0</td>
<td>4.0</td>
</tr>
<tr>
<td>PE 235</td>
<td>Volleyball, Women</td>
<td>3.0</td>
<td>12.0</td>
</tr>
<tr>
<td>PE 236</td>
<td>Volleyball Pre-Season Conditioning</td>
<td>1.0</td>
<td>4.0</td>
</tr>
<tr>
<td>PE 239</td>
<td>Water Polo - Men</td>
<td>3.0</td>
<td>12.0</td>
</tr>
<tr>
<td>PE 241</td>
<td>Water Polo - Women</td>
<td>3.0</td>
<td>12.0</td>
</tr>
<tr>
<td>PE 243</td>
<td>Wrestling</td>
<td>3.0</td>
<td>12.0</td>
</tr>
<tr>
<td>PE 245</td>
<td>Pep Unit</td>
<td>2.0</td>
<td>8.0</td>
</tr>
</tbody>
</table>

**Course Descriptions**

**PHAR 173/174** Pharmacy Tech Occ Work Experience 3-4 6-8

**PMT 2** Injection Molding Fundamentals 1.5 3.0

**PMT 43/44** Plastics Manufacturing Technology Occupational Work Experience 3-4 15-16

**PMT 59** Injection Molding I 2.5 5.0

**PMT 61** Fiberglass I 2.5 5.0

**PMT 63L** Specialty Plastics Lab .5 2.0

**READ 6** Tutor Training .5 1.0

**SL 48** Intermediate II Sign Language 2.0 4.0

**SLP 120L** Phonetics Lab 1.0 3.0

**SPCH 30** Communication Disorders 1.0 4.0

**SPCH 31** Communication Disorders 1.0 4.0

**SPCH 236** Beginning Forensics Workshop 1.0 4.0

**SPCH 237** Intermediate Forensics Workshop 1.0 4.0

**SPCH 238** Advanced Forensics Workshop 1.0 4.0

**SPCH 239** Forensics Workshop 2.0 8.0

**TH 105** Intro to Mus Theatre Tech 3.0 12.0

**TH 108** Improvisation for the Theatre 3.5 7.0

**TH 110** Fundamentals of Acting 3.5 7.0

**TH 115** Movement for the Actor 3.0 6.0

**TH 117** Stand-Up Comedy 3.0 6.0

**TH 123** Stage Make-up 3.0 6.0

**TH 130** Rehearsal & Performance for the Minor Role 1.0 4.0

**TH 131** Rehearsal & Performance for the Supporting Role 2.0 8.0

**TH 132** Rehearsal & Performance III 3.0 12.0

**TH 133** Stage Crew Activity 1.0 4.0

**TH 134** Theatre Production 2.0 8.0

**TH 136** Touring Theatre Production for Supporting Roles 2.0 8.0

**TH 137** Touring Theatre Production for Leading Roles 2.0 8.0

**TH 138** Theatre Dance-Beginning Jazz 2.0 4.0

**TH 139** Theatre Dance-Intermediate Jazz 2.0 4.0

**TH 143** Theatre Dance-Intermediate Tap 2.0 4.0

**TH 145** Costume Production for Dance 1.0 4.0

**TH 146** Musical Theatre Production for Chorus 2.0 8.0

**TH 147** Musical Theatre Production for Leading Roles 3.0 12.0

**TH 155** Radio Production 3.0 12.0

**TH 156** Video Production 3.0 12.0

**TH 160** Great Film Directors 3.0 6.0

**TH 216** Acting for the Camera 3.0 6.0

**TH 221** Costuming for the Stage 3.0 6.0

**TH 238** Writing for Movies and Television 3.0 6.0

**WELD 43/44** Welding Occ Work Experience 3-4 15-16

**WELD 51L** Advanced Arc Welding Specialty Lab 1.0 4.0

**WELD 54L** Advanced Pipe Welding 2.0 4.0

**WELD 210L** Arc Welding Applications 2.0 6.0

**WELD 240** Advanced Tungsten Arc Welding Lab 2.0 4.0

**WELD 250L** Gas Tungsten Arc Welding Applications 2.0 4.0

**WMT 43/44** Woodworking Manufacturing Tech Occ Work Experience 3-4 15-16

**WMT 102** Machine Wood Technology 4.0 8.0

**WMT 103** Machine Wood Technology II 4.0 8.0

**WMT 107** Wood Finishing 3.0 6.0
PROGRAM PLANNING

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

CHANGE OF ADDRESS

Changes in address must be reported immediately to the Office of Admissions and Records. Failure to comply with attendance and residence regulations may result in dismissal from the College.

COLLEGE UNITS

Each college course is worth a certain number of "units" or "credits" or semester "hours". This number is determined by the type of class it is and the number of hours per week that 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. Refer to the "Announcement of Courses" section in this catalog or the courses listed in the class schedule for the unit value of any course you wish to take.

An alternative way of looking at the unit of credit would be that one unit of credit is defined at Cerritos College as eighteen (18) hours of instruction by way of lecture. You would earn a unit of credit over 18 weeks if you participate in a lecture class for the full term. Therefore, fifty-four (54) hours of lecture equate to three (3) units of credit. On the other hand, one unit of credit for a lab class equate to fifty-four (54) hours of non-lecture instruction. One hundred eight (108) hours of lab equate to two (2) units of credit. With the foregoing in mind, eighteen (18) hours of lecture plus fifty-four (54) hours of lab result in two (2) Carnegie units of credit for the student.

Example:
- 18 hours of lecture = one (1) unit
- 54 hours of lab = one (1) unit

Lecture hours x number of weeks $\leftrightarrow$ 18 ___ lecture units
Lab hours x number of weeks $\leftrightarrow$ 54 ___ lab hours

UNIT CREDIT FOR MILITARY SERVICE

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

MILITARY WITHDRAWAL

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

CLASSIFICATION OF STUDENTS

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.

Special (Veysey)- One currently enrolled in the 11th or 12th grade in high school (may include summer session prior to 12th grade) and who desires to enroll for college credit. Such a student must have a letter of approval from the high school principal or high school counselor and parental consent.

PARKING REGULATIONS

Parking on campus is by permit only. Any motorized vehicle (except mopeds and motorcycles) requiring registration with the California Department of Motor Vehicles must have a current parking permit each semester. On vehicles, PERMITS ARE TO BE HANGING FROM THE REAR VIEW MIRROR OR ON DASHBOARD, WITH PERMIT NUMBER READABLE FROM THE OUTSIDE OF THE VEHICLE. NO OTHER LOCATION IS ACCEPTABLE. Vehicles without permits will be cited. Vehicles may be parked only in spaces or areas designed
for vehicle parking. All vehicles must be parked with the front of the vehicle heading into the parking stall. Students may not park in staff parking lots.

A one-semester parking permit may be purchased at Registration, or anytime during the semester at the Admissions Office or Campus Police Department, for $20.00 for fall or spring semesters and $10.00 for the summer session. A daily permit may be obtained for a $1.00 from the yellow Park-Ur-Self meters located on the sidewalks in the student parking lots. The meters accept four quarters or a $1.00 bill (meter does not dispense change). Students may not park in staff parking lots or stalls unless they are disabled and have a "DP" plate or placard AND a student parking permit displayed. During the "open registration" period listed in the class schedule, parking is free in student stalls in lots C-1 and C-2. VEHICLES NOT DISPLAYING A VALID PERMIT OR INCORRECTLY PARKED IN STAFF, METERED, OR HANDICAPPED STALLS, ETC., WILL BE ISSUED A PARKING CITATION.

Parking Areas

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

Designated Parking Areas are Color Coded:

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

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

Parking on the Interior Campus

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

Responsibilities for Penalties

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

Lost, Stolen, or Damaged Permits

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

Refunds

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

Liability

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

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

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

ADVANTAGES OF HONORS

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

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

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

BENEFITS FOR SHP STUDENTS

- Working one-on-one with professors
- Small SHP course sizes
- Library privileges at UCLA and UCI
- Participation in regional and national honors conferences
- Guaranteed acceptance into several CSU honors programs offering priority registration
- Guaranteed admission or priority consideration for admission at:
  - UC Irvine • Chapman University
  - UCLA • Occidental College
  - UC Riverside • Pitzer College
  - UC Santa Cruz • Pomona College
  - University of Pepperdine
  - University of Southern California . . . and others

REQUIREMENTS OF THE PROGRAM

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

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

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

CRITERIA FOR ADMISSION TO THE SHP

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

For applications or further information, contact:
Cerritos College
The Scholars’ Honors Program
(562) 860-2451, ext. 2728
shp-info@cerritos.edu
On the Web: http://www.cerritos.edu/shp
Learning Communities Program

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

WHAT IS A LEARNING COMMUNITY?

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

WHAT ARE THE BENEFITS OF JOINING A LEARNING COMMUNITY?

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

FREQUENTLY ASKED QUESTIONS?

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

- Student ↔ Student
- Student ↔ Faculty
- Faculty ↔ Faculty

Are the Learning Community courses transferable?
Yes, your credit transcript will reflect the classes as two separate courses.

What are the requirements to enroll?
You must enroll in both courses. The prerequisites are the same for each course separately. Check the Schedule of Classes.

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

HOW DO I REGISTER?

Learning Community courses are identified in the Schedule of Classes by an instruction after the class listing. Follow the instruction and register for both courses. For help, check with your counselor or the Learning Communities Program Coordinator.

LEARNING COMMUNITIES PROGRAM WITHDRAWAL POLICY

Student enrolls in a group of two or more courses as part of a learning community, he or she MUST MEET THE PREREQUISITE(S), if there are any, for EACH course in the combination. Students enrolled in one section of a course that is part of a learning community must be enrolled in all other courses in that group. If one course is dropped, the student MUST and WILL BE DROPPED 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.

GRADE CHANGES
Accomplishment in course work is indicated by the following symbols:

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

*RD - The RD symbol is used when there is a delay in reporting the grade of a student due to circumstances beyond the control of the student. It is a temporary notation to be replaced by a permanent symbol as soon as possible. RD shall not be used in calculating grade point averages.

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 the 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.

A student may petition for a time extension due to unusual circumstances.

WITHDRAWAL
Once students are enrolled it is their responsibility to attend class and complete the course requirements. It is the responsibility of the instructor to withdraw a student who is no longer participating in a course. (Title 5, Section 58004 (C) (3).)

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

WITHDRAWAL FROM CLASS - EXTENUATING CIRCUMSTANCES
1. The Board of Trustees authorizes withdrawal from class (classes) in extenuating circumstances after the last day of the fourteenth week (or 75% of the term, whichever is less) upon petition of the student or his/her representative and after consultation with the instructor(s) or appropriate faculty. Extenuating circumstances are verified cases of accidents, illnesses, or other circumstances beyond the control of the student. Withdrawal after the end of the fourteenth week (or 75% of a term, whichever is less) when the district has authorized such withdrawal in extenuating circumstances, after consultation with appropriate faculty, shall be recorded as a "W."

2. Verified cases of accidents, illnesses, or other circumstances beyond the control of the student means those circumstances that have been documented in writing. For example - an illness must be verified in writing by a physician or hospital, a change in job verified in writing by the employer.

3. Procedure for Withdrawal
   a. The student or his/her representative initiates the request with appropriate faculty.
   b. The faculty member may deny or approve the request. Approval is contingent on verification of reason or circumstances by the appropriate Instructional Dean. The faculty member completes and signs the grade change request form and forwards to the Instructional Dean.
   c. The student is referred to the appropriate Instructional Dean who will request and approve written verification of the reason or circumstances.
   d. Students are not to handle the request form or be involved in the process once the faculty member has agreed to approve the request.
   e. Students are not to be given a change request form.
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 coursework attempted.

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

B. Progress Probation
Students who have enrolled in a total of at least twelve (12) semester units as shown by the official academic record shall be placed on progress probation when the percentage of all units at Cerritos College in which the students have enrolled and for which entries of "W," "I," or "NC" are recorded reaches or exceeds 50 percent.

Probation is entered on the student's permanent records and transcripts of record. Students placed on academic or progress probation will be notified by mail to 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 percent-

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

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

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

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

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

 Petitions must be filed prior to August 1 for the Fall registration. Students who have been dismissed from another college or university must also file a petition by the above date.

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

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

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

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

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

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

BASIC SKILLS COURSE LIMITATIONS

No more than a total of thirty (30) units from the remedial courses listed below are allowed:

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

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

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

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

ACADEMIC RENEWAL REGULATIONS

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

1. A student may request that substandard course work attempted in up to two semesters be annotated and disregarded in the computation of the student's grade point average or requirements for a degree. Only those requested courses with substandard grades will be disregarded.
2. At least twenty-four (24) units of college work with a grade point average of 2.0 must be completed. Twelve (12) of those units must be completed at Cerritos College.* The twenty-four (24) units with the 2.0 ("C") grade point average must be completed subsequent to the semester(s) from which course work is to be alleviated.
3. At least one (1) calendar year must have elapsed from the time the grades to be disregarded were earned.
4. A student may be granted academic renewal only once.
5. No alleviated course work shall apply toward degree requirements.
6. In the petition, the student must specify course(s) to be considered under the academic renewal policy as well as the term in which the course work was attempted.
7. Some senior-level institutions and, possibly, certain out-of-state community colleges do not honor academic renewal. It is the student's responsibility to insure that his/her transfer institution will approve of academic renewal from Cerritos College.

A student may petition for academic renewal at the Office of Admissions and Records. The Academic Records and Standards Committee will review all petitions and determine if the petition will be granted.

* A student wishing to have the twelve-unit requirement waived may petition the Academic Records and Standards Committee by obtaining and completing the appropriate form and filing it in the Admissions and Records Office.

GRADE REPORTS

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

CREDIT BY EXAMINATION

"Credit by Examination" may be granted for proficiency previously accomplished in other than an accredited institution, for experience, study, travel, or for formal service-connected courses. Credit assessed 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, Veteran's 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.

Credit by exam for the Foreign Language Department will be set in the fourth week of each semester. It may be taken only for French 101 and 102; German 101 and 102; Japanese 101 and 102; Spanish 101, Spanish 111, Spanish 102, and Spanish 112.

ELIGIBILITY GOVERNING "CREDIT BY EXAMINATION"

1. The student is currently enrolled at Cerritos College.
2. The student's overall G.P.A. in all college units attempted at Cerritos College is 2.0 (This requirement is waived for new entering students.)
3. The course is approved for "Credit by Examination" (See Schedule...
of Classes for list of approved courses).
4. Student has met prerequisite(s) for the course.
5. The student has not already received credit for a more advanced course which follows this course in sequence.
6. The student has not previously challenged this course.
7. The course is one for which high school or college credit has not been previously granted, unless there is a course articulation agreement between Cerritos College and an educational institution or agency.
A student may earn up to a maximum of 12 units through "Credit by Examination."
Those students planning to transfer to the University of Southern California should be advised that credit by exam grades are not accepted at U.S.C.
A student may earn up to a maximum of 12 units through "Credit by Examination."
Those students planning to transfer to the University of Southern California should be advised that credit by exam grades are not accepted at U.S.C.

CREDIT/ NO-CREDIT COURSES
Title 5, California Administrative Code, permits the granting of credit toward a degree or certificate for courses completed on a credit/no-credit basis.
A. Non-Optional:
The courses are graded entirely on a Credit/No Credit basis. These courses are indicated in the Schedule of Classes. Units earned in such courses shall not be considered as part of the 15 unit limit in the Optional Credit/No Credit policy.
B. Optional:
The option to enroll in a Credit/No Credit class is designed to encourage students to explore courses in which they might have an interest. Only those courses specifically listed by each department may be taken on this basis. Units thus earned will be counted toward the A.A. Degree, but will be disregarded in determining grade point average.
Courses approved for Credit/No Credit will be indicated on the student's permanent record as "CR" with units earned and no grade points or "NC" with no units earned and no grade points. Units attempted for which "NC" is recorded shall be considered in probation and dismissal procedures. The student is required to take all tests, complete all assignments, and shall be subject to withdrawal and attendance regulations. Standards of evaluation are identical for all students. The student shall petition for an optional Credit/No Credit course through the Admissions and Records Office. The approval for such a class must be no later than the end of the first 30 percent of the term.
Only courses which are A.A. Degree applicable may be placed on the optional course list by the departments. Also, "CR" or "NC" grades cannot be converted to a letter grade once the approval form has been filed in the Admissions and Records Office.

ELIGIBILITY GOVERNING "CREDIT/ NO-CREDIT COURSES"
1. The student must have a cumulative grade point average 2.0 in all college units attempted.
2. The student may take no more than two courses per semester on a credit/no-credit basis.
3. The course must be on an approved list of credit/no-credit courses. The list is available in the Counseling Office and in the "Schedule of Classes."
4. No more than fifteen (15) units of credit/no-credit courses may be completed at Cerritos College, nor may more than fifteen (15) units earned on a credit/no-credit basis be applied toward the Associate in Arts degree. Some courses are graded entirely on a credit/no-credit basis. These courses are indicated in the schedule of classes. Units earned in such courses shall not be considered as part of the 15 unit limit in the optional credit/no-credit policy.
5. There is no provision for rescinding an approved petition for credit/no-credit.

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

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

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

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

**COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)**

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

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

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

Credit for CLEP exams is granted as follows:

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

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

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

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

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

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

Credit for Subject Examinations may be granted by Cerritos College for scores of 50 or more. The units may be applied in an area of general education and/or the major at the discretion of the college. Requests for general education credit should be submitted to the Admissions and Records Office on a Petition to the Academic Records and Standards Committee for. 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 each course you take. That knowledge becomes yours, and can be used by you, only if it is gained through your own personal efforts. Receiving a grade in a course, without acquiring the knowledge that goes with it, diminishes your chances for future success.

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

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

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

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

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

- Copying, either in part or in whole, from another's test or examination;
- Discussion of answers or ideas relating to the answers, on examination or test when such discussion is prohibited by the instructor;
- 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.

Options may be taken by the faculty member 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.

ASSOCIATED STUDENTS

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

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

STATEMENT OF STUDENT RIGHTS AND RESPONSIBILITIES

PREAMBLE

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

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

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

CLASSROOM RIGHTS AND RESPONSIBILITIES

The professor in the classroom and in conference should permit free discussion, inquiry and expression of thought by the student. Student performance should be evaluated solely on an academic basis, not on opinions or willingness to accept professors' personal beliefs, or conduct unrelated to academic standards. Student should be free to take reasoned exception to the data or views offered in any course of study for which they are enrolled and for maintaining standards of academic performance established for each course in which they are enrolled. The student has the right to have the course taught in a systematic, meaningful manner and of knowing at the beginning of the course those academic standards required of the student in the course. Administrative staff and faculty members should respect confidential information about students such as student views, beliefs and political associations, which is acquired in the course of their work. Transcripts of academic records should contain only information about academic status.

ON THE CAMPUS RIGHTS AND RESPONSIBILITIES

Students should be free to examine and discuss all questions of interest to them, and express opinions publicly and privately. They should be free to organize and join associations to promote their common interests. The membership, policies and actions of a student organization will be determined by vote of only those persons who hold bona fide membership in that college organization. Campus advisors shall advise organizations in the exercise of their rights and responsibilities.
Student organizations shall be required to submit a statement of purpose, criteria for membership, rules of procedures, a current list of officers and the advisor shall certify the list of verified members. Campus organizations should be open to all students.

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

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

IN THE LARGER COMMUNITY

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

STUDENT PUBLICATIONS

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

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

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

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

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

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

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

GRIEVANCE PROCEDURE: STEP I - INFORMAL ACTION

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

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

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

D. The ASCC Supreme Court Chief Justice or 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 will attempt to involve the levels of administration concerned with the problem and should be completed within ten (10) school days (a school day is defined as a day when classes are held). In the event the informal procedure fails, then the formal procedure would be implemented.

STEP II - FORMAL ACTION

A. PRELIMINARY

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

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

2. The Chief Justice or designee shall serve as the Hearing Committee Chairman, but shall have no vote in committee decisions. The five voting members of the Hearing Committee shall be selected within the first six weeks of the school year. Names selected by the Faculty Senate, ASCC Senate, and ASCC Cabinet are to be submitted to the Chief Justice. Members of the Committee will serve for a school year.

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

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

B. FORMAL HEARING

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

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

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

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

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

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

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

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

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

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

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

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

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

13. The Hearing Committee should attempt to reach a decision by discussion and consensus on a workable solution. Voting should be a last course of action.
14. If in the course of the proceedings, a student graduates before a solution is found, the student shall not be denied full consideration under this policy. A student may also submit a grievance after graduation if the grievance did not become known until that time. However, it must be submitted within thirty (30) school days after the grievant should have reasonably become aware of the act or condition on which the complaint is based.

STEP III - APPEALS PROCESS

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

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

3. If the President rejects the Committee's decision, he shall submit his decision with the stated reasons for his objections to the Hearing Committee within ten (10) school days. The Hearing Committee shall within five (5) school days reconsider its decisions and re-submit them to the President for his final decision.

4. The President shall transmit his final decision to both parties and the Faculty Senate vice chairman or designee within five (5) school days.

5. An appeal of the President's decision may be submitted to the Board of Trustees by either party. If unresolved, the appeal must be submitted within ten (10) school days after the President's decision. The Board may review an appeal for two (2) consecutive Board meetings before making a final determination of the matter at the college level.

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

STUDENT GRADES OR GRADING GRIEVANCE POLICY

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

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

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

GRIEVANCE PROCEDURE STEP I

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

STEP II

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

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

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

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

STEP III

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

STEP IV

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

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

STUDENT CONDUCT POLICY

INTRODUCTION

The California Education Code requires every community college governing board to adopt specific rules governing student behavior along with applicable penalties for violation of such rules. Students enrolling in Cerritos College assume an obligation to abide by all college regulations.

DISCIPLINARY PROCEEDING

In all disciplinary actions the student should be informed of the nature of the charges against him/her, that he/she is given a fair opportunity to refute them, and that the institution not be arbitrary in its actions.

GROUND FOR DISCIPLINARY ACTION

A student may be disciplined for one or more of the following causes which must be District related. These categories of behavior are not intended to be an exhaustive list, but are examples of causes
and are good and sufficient cause for disciplinary action.

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

DISCIPLINARY ACTIONS AND PROCEDURES

1. **Official Reprimand** — An admonishment or warning that becomes part of a student’s file and is considered in the event of future violations.
   1. May be initiated by any faculty or college manager and sent in writing to the Office of Judicial Affairs.
   2. The Coordinator of Judicial Affairs shall determine if there exists good and sufficient reason to initiate disciplinary action and student should be notified of such actions.
2. **Disciplinary Probation** — Disciplinary action which may include exclusion of the individual from designated co-curricular activities of the college community.
   1. Shall be initiated by the Office of Judicial Affairs.
   2. The nature of the misconduct, dates, time, and place, and length of probation shall be placed in writing. Written copies shall be sent to the student, and copies filed with the Office of Judicial Affairs.
3. **Instructor Removal** — Instructor may remove a student from his or her class when the student has interfered with the instructional process. Duration will be for the day of the removal and the next class meeting.
   1. The instructor or Instructional Dean shall immediately report the removal to the Office of Judicial Affairs for appropriate action such as official reprimand, suspension, or recommendation of expulsion.

4. **Suspension** — Is an action defined as exclusion from college for a specified period of time.
   1. Suspensions shall be initiated by the President or designee.
   2. The duration of the suspension from one or more classes shall be for a period of up to ten days of instruction, for the remainder of the school term, or from all classes and activities of the community college for one or more terms.
   3. There may be an immediate suspension when necessary to protect lives or property and to insure the maintenance of order pending a hearing within ten school days.
5. **Expulsion** — Is defined as the removal of a student from any and all classes of the college.
   1. Only the Governing Board of the college may expel students for “Good Cause” or when other means of correction fail to bring about proper conduct of a student.
   2. The duration of the expulsion may be indefinitely.
   3. The expulsion is noted in the permanent file of the student.
   4. Readmittance after expulsion requires Governing Board action.

HEARING PROCEDURES

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

1. A Hearing Board shall be responsible to the President for reviewing and making recommendation to the President.
2. Membership of the Hearing Board shall include the following:
   1. A Hearing Board — Two members of the instructional staff appointed by the Faculty Senate.
   2. Students — Two Court Justices appointed by the ASCC Chief Court Justice.
3. Management — The Coordinator of Judicial Affairs or a member of the management staff of the college appointed by the President. The manager shall serve as the Chairperson of the Hearing Board, but will not vote except to break a tie.
4. Procedures for a Hearing —
   1. Written notice of a hearing shall be mailed or delivered to the student. A hearing must be held within ten (10) days of the suspension if the suspension is an immediate suspension. A school day is defined as any day Monday through Friday that all normal college business is conducted, both in the classroom and in the administrative offices. All weekend and college holidays are excluded.
   2. Notice shall include date and place of hearing, a statement of all charges, a copy of Governing Board policies pertaining to suspension and expulsion, opportunity of student to appear in person, or to employ and be accompanied by counsel, at their own expense, and the opportunity to present evidence, oral and documentary.
   3. Hearings shall be conducted in the manner consistent with the orderly conduct of the affairs of the college, which seems to the Hearing Board most conducive to the determination of the truth.
   4. All hearings be tape recorded. Transcriptions and a transcript shall be available at all times to parties directly involved, at their own expense.
   5. Immediately following the hearing, the Hearing Board shall submit the recommendation to the President. The President and/or Governing Board will make the final decision.
   6. The decision of the President to suspend shall be given to the student in writing within a five (5) school day period; the decision of the Governing Board to impose expulsion shall be given to the student in writing within two regular Board meetings.
THE OFFICE OF JUDICIAL AFFAIRS

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

TITLE IX POLICY

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

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

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

EQUAL OPPORTUNITY POLICY

Cerritos College believes in a close relationship among students, faculty, staff, and community. The District is strongly committed to achieving staff diversity and the principles of equal opportunity employment. The District encourages a diverse pool of applicants and does not discriminate on the basis of race, color, national origin, ancestry, sex, age, religion, marital status, disability, or sexual orientation in any of its policies, procedures or practices. In fact, the college encourages applications from all segments of qualified people. Questions concerning the application of the policy may be addressed to the Human Resources Office by calling (562) 860-2451, Ext. 2284.

SECTION 504/AMERICANS WITH DISABILITIES ACT POLICY

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

COMPLAINT PROCEDURE

The complaining party should first discuss the complaint with the individual(s) involved or with the Cerritos College Section 504/ADA Coordinator (Robert Hughlett, (562) 860-2451, Ext. 2334 or by e-mail at hughlett@cerritos.edu.). The 504/ADA Coordinator will contact all parties concerned and attempt to reach some resolution of the problem. If the complaint cannot be formally resolved within ten working days, the complaining party may then proceed to file a formal complaint. The informal complaint procedure is optional.

STUDENT ORGANIZATIONS

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

Every year new clubs are chartered as they are requested by students. Every club on campus is a part of the Inter Club Council which meets regularly to discuss activities, projects and problems pertaining to its members.

Students with a 2.0 G.P.A. and currently enrolled may join a club. Clubs meet on the 2nd and 4th Tuesday of each month. Information concerning clubs may be obtained in the Office of Student Activities.

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

ATHLETICS

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

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

STUDENT HEALTH AND WELLNESS CENTER

The Student Health and Wellness Center is responsible for the health and wellness of students on campus. Our goal is to promote physical and emotional wellness, prevent illness and injury, provide basic outpatient health services, and to educate students toward taking responsibility for their own health.

The Student Health and Wellness Center exists to help the student maintain a healthy state. We define health as the feeling of physical, emotional, social, and psychological well-being. With well-being the student can obtain optimal benefits from his or her educational program. The Student Health and Wellness Center can be reached by calling (562) 860-2451, Ext. 2321.

DISABLED STUDENT PROGRAMS AND SERVICES POLICY

Cerritos Community College District affirms its programs and activities are available to all qualified persons without regard to disability. The College is also subject to Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act.

The primary objective of the Disabled Student Programs is to mainstream disabled students into general campus programs and activities to the greatest extent feasible. The ability of each disabled student to function independently in the collegiate environment is the ultimate goal. Inquiries regarding the Disabled Student Program or the District's non-discrimination policy relative to Section 504 should be directed to the Director of Disabled Student Programs and Services, Dr. Robert Hughlett or by calling (562) 860-2451, Ext. 2334.

DISABLED STUDENT PROGRAMS AND SERVICES

Individuals with limitations due to a disability may receive support services and instruction from one or more of five programs at Cerritos. Those with mobility, visual, hearing, speech, psychological and other health impairments as well as learning and developmental disabilities are served. All students are provided with an initial interview, counseling and referral as needed through Central Intake and Services (C.I.S.). Additional non-classroom related assistance for all qualified students includes: registration, campus orientation, placement tests, elevator key, parking, matriculation and support with disability management issues. Special instruction and services which are classroom related are provided through the Centers described below. For further information or an initial appointment contact C.I.S. at (562) 860-2451, Ext. 2333, or visit our website at http://www3.cerritos.edu/student services/dspmentor/index.html.
RESOURCE CENTER: The Resource Center assists students with mobility or other health limitations. The services available include: in-class aides, note-taking, tutoring referral, test-taking, disability management, textbooks on tape, liaison with instructors and other campus offices, community agency resource information, referral for special instruction, wheelchair loan and storage, calculator and tape recorder loan, use of modified typewriters and specialized equipment, liaison with the Department of Rehabilitation and other agencies, information and referral to Counseling and Guidance and adaptive physical education classes.

INSTRUCTIONAL SUPPORT CENTER: The Instructional Support Center serves students who are learning disabled, developmentally delayed and those with acquired brain injuries. Services available include: learning disability eligibility assessment, pre-registration, disability management, textbooks on tape, liaison with instructors and other campus offices, community agency resource information, referral for special therapy and adaptive physical education, tape recorder and calculator loan, liaison with Regional Center and other agencies. Classes are offered four days per week and are open-entry/open exit. Instruction is designed to prepare for credit enrollment in the college. A lab is also available for students to receive support in other credit courses.

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

HIGH TECH MICROCOMPUTER CENTER: All visually impaired and those other disabled students who would benefit from microcomputers specifically adapted to accommodate various disabilities are also encouraged to consider the High Tech Microcomputer Center located in the Instructional Support Center. Specialized programs for the learning disabled, large screen software and screen readers for the visually impaired, word prediction word processing and keyboard modification for the physically disabled are some of the possibilities.

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-ericial 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 inpatients or outpatients of Rancho.

STUDENT INSURANCE
Applications for voluntary insurance may be obtained in the Student Health and Wellness Center, Student Activities Office, and Business Services Office.

STUDENT I.D. CARD
It is imperative that all students be in possession of their student identification card at all times while on the Cerritos College campus. This card is necessary for “buy-backs” in the College Bookstore and it is important to present if library privileges are to be enjoyed.

An I.D. card can be obtained from the Student I.D. Center which is located between the Food Court and the College Bookstore at any of the following times:

Regular Hours
During fall and spring semesters, 9:00 a.m. to 7:00 p.m., Monday through Thursday, and from 9:00 a.m. to 1:00 p.m. on Friday.
During summer sessions, 9:00 a.m. to 1:00 p.m., Monday through Thursday.

Extended Hours
During fall and spring walk-in registration, 8:00 a.m. to 8:00 p.m., Monday through Thursday and from 9:00 a.m. to 4:00 p.m. on Friday.

If a student has special circumstances and cannot be obtained the identification card during any of the hours listed above, arrangements can be made by calling (562) 860-2451, ext. 2458.

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

USED BOOK BUYBACK AT THE BOOKSTORE
The bookstore arranges several formal buybacks during the school year, but will buy back a book anytime throughout the year. The Bookstore shall purchase used textbooks adopted for the next academic term in quantities sufficient to meet course requirements at not less than 50% of the retail price. The Bookstore shall purchase used books not adopted for the next academic term or in excess of course requirements as published national market value.

Bookstore will accept returns in accordance with the following policies:
1. Non-textbook items may be refunded or exchanged at any time with original receipt.
2. Textbooks in resalable condition may be refunded with receipt within seven (7) calendar days from the start of classes or within two (2) days of purchase thereafter, including during summer term.
3. Textbooks purchased during the last week of classes or during exams may be sold back under the book buyback policy.
4. Computer software may be returned if it is unopened and shrink-wrapped.
5. In addition, upon proof of drop/add, the Bookstore will accept textbook returns from students who have dropped a course up to thirty (30) days from the start of classes or until the end of the official drop/add period, whichever comes first.

BOOKSTORE REFUND POLICY
1. Non-textbook items may be refunded or exchanged at any time with 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. Computer software may be returned, providing it is unopened and shrink-wrapped.
6. 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 11:00 a.m. to 1:00 p.m. Monday through Thursday during the fall and spring semesters. Vending machine service is provided at the north west corner of the Liberal Arts building and northwest of the Institute for Lifelong Learning building. Vending machines are located throughout the campus.

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

Full and part-time jobs are available, as well as student internships through the Student Training and Employment Placement Program. Employment listings may be viewed at the Career Services Center or through the Internet at http://www.jobtrak.com.

Job Placement Services is open Monday through Thursday, 8:00 A.M. to 8:00 P.M., and Friday, 8:00 A.M. to 4:30 P.M. For more information call (562) 860-2451, Ext. 2366, e-mail jobplacement-info@cerritos.edu, or visit us at http://www.cerritos.edu/career-services/job-placement

Career Center
As part of our commitment to student success, the Career Center will assist students who are undecided about their majors and/or their vocational goals. Comprehensive career counseling and information resources are available to aid in that process. The Career Center is located in the Administration Building and is open Monday through Thursday, 8:00 A.M. to 8:00 P.M.; and Friday, 8:00 A.M. to 4:30 P.M. Call (562) 860-2451, Ext. 2356 for more information.

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

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

The Re-entry Resource Program is located in the Career Services Center and is open Monday through Thursday, 8:00 A.M. to 8:00 P.M.; and Friday, 8:00 A.M. to 4:30 P.M. Call (562) 860-2451, Ext. 2362 for more information.

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

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

TRANSFER CENTER
The Transfer Center is designed to increase the transfer rate of Cerritos College students to four-year colleges and universities. The Transfer Center has been charged with the responsibility to give priority to 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 Administration building and office hours are 8:00 A.M. to 8:00 P.M., Monday through Thursday, and 8:00 A.M. to 4:30 P.M. on Friday. Call (562) 860-2451, Ext. 2154, for further information.

CHILD DEVELOPMENT CENTER
A Nationally Accredited, State Licensed Child Development Center is available for children, ages 2 years, 9 months through Kindergarten. Its purpose is to provide an educational program which helps the individual child grow to his/her fullest potential. The Center focuses on developmentally appropriate activities to foster respect for cultural diversity by providing multicultural, anti-bias, and non-sexist activities in curriculum. The program features Sensory Development, Language Arts, Math, Science, Dramatic Play, Art, Music, Fine & Gross Motor Development, and Social Studies. Registration for the Center takes place each semester on a first-come, first-served basis considering space available, age of child, and readiness for group care. Students, staff and the community may use the Center. Physical examination and T.B. Test results must be available at time of enrollment and cannot be over one year old. Current, up-to-date Immunization Records must also be available. Students interested in these services should contact the Child Development Center at (562) 467-5051 or 860-2451, Ext. 2583.

LIBRARY/ LEARNING RESOURCE CENTER
The Cerritos College Library/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 ready access to over 70,000 books, 2,000 pamphlets, 400 magazine and newspaper subscriptions, and 3,500 microfilm reels in an open stack arrangement. The automated catalog provides access to the Internet and online access to over 3,200 periodicals and journals. All library materials are carefully selected by classroom faculty and library faculty as integral resources 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 informational flyers on such topics as using the card catalog, periodical indexes, and reference materials are available
without charge. Copies of Library produced bibliographies and pamphlets are also provided to faculty.

The Library provides typewriters for patron use. Computers available for student use can be found on the lower level of the LRC in LC 102. Photocopiers are located in the Library for self-service copying.

Instructional Media Services, also located on the lower level, provides instructional support for the entire campus as well as satellite locations. Included in this area are graphic art and photography production studios, 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 production and closed circuit video systems on the campus, including Speech, Cosmetology, Dental Assisting, and Health Occupations.

The Independent Study Center (LC-114), located on the lower level of the LRC, houses several thousand audio and video tapes, filmstrips, slides, and other media materials for student use. A computer assisted attendance system permits rapid check-in and check-out by students.

All areas of the Library/LRC are staffed with qualified personnel eager to help you. The facility is open during the regular school year Monday through Thursday, 8 a.m. to 10 p.m., Friday, 8 a.m. to 4:30 p.m. The Library is also open 9 a.m. to 3 p.m. on Saturday.

LEARNING ASSISTANCE PROGRAM

The Learning Assistance Program is a campus support system designed to provide services and information to students who want to acquire, improve, review, or maintain personal learning skills. The Learning Assistance Program (LAP) has a centralized location where students can go to develop learning skills that will improve their efficiency and effectiveness in the classroom. The program’s information referral system connects students with all campus learning assistance programs, services, personnel, and materials, enabling students to learn more in less time with greater ease and confidence. The Learning Assistance Program includes tutorial services, supplemental instruction, The Survey of Reading and Study Efficiency, open lab facilities, and learning skills workshops. All services are free to Cerritos College students. The Learning Assistance Program is housed in the Learning Resource Center. Please call (562) 860-2451, Ext.2404 or 2405 for office hours.

DIRECTORY INFORMATION

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

Currently enrolled students may withhold directory information by notifying the Vice President of Student Services, in writing each term, within two weeks after the first day of instruction. Title 5 (California Administrative Regulations) Section 54626.

CONSENT

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

SEXUAL ASSAULT AND ACQUAINTANCE RAPE POLICY

Cerritos College is committed to providing a safe and secure environment for all members of the campus community. The Sexual Assault and Acquaintance Rape policy is in accordance with Assembly Bill 3098 and Section 201, Public Law 101-542 as amended by Public Law 102-26. Sexual assault and acquaintance rape are crimes and will be treated as such. Students and employees who become victims of sexual assault or acquaintance rape are encouraged to report the crime immediately to the Campus Police. The college is dedicated to providing prompt and compassionate services to all crime victims. In the event of a sexual assault on campus, the chief of Campus Police will notify the President/Superintendent.

SEXUAL HARASSMENT

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

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

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

Sexual harassment occurs when unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature takes place and:
1. Is made explicitly or implicitly a term or condition of an individual’s educational status or employment; or
2. Is used as a basis for educational or employment decisions affecting such individual; or
3. Has the purpose or effect of unreasonably interfering with an individual’s work performance or creating an intimidating, hostile, or offensive educational or working environment; or
4. Is used as the basis for any decision affecting the individual regarding benefits and services, honors, programs, or activities available at or through the District.

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

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

**ALPHA GAMMA SIGMA**

Alpha Gamma Sigma is a statewide honor scholarship society. The fundamental purpose of the organization is to promote and maintain scholastic and social leadership. The following types of membership are available:

**INITIAL MEMBERSHIP**
A person may attain initial membership if he/she has completed 12 semester (or quarter equivalent) units in a maximum of 3 semesters or 5 quarters at any recognized institution of higher education and has a cumulative grade point average of 3.0. No units acquired more than two years prior to application for initial membership shall be used prohibitively.

**TEMPORARY MEMBERSHIP**
All life members of the California Scholarship Federation and those who graduated with a minimum G.P.A. of 3.5 at the high school level shall be invited to become temporary members during their first semester in a community college and shall have, upon payment of dues, all the privileges of membership except that of holding a state elective office.

**CONTINUING MEMBERSHIP**
An initial member may attain continuing membership by:

a. Achieving for the previous semester or quarter not less than a 3.0 G.P.A. in courses of recognized college standing, or

b. Maintaining a cumulative G.P.A. of 3.0 or better in courses of recognized college standing.

c. Continuing members will receive one semester or quarter's grace for every semester or quarter of earned continuing membership if the member's G.P.A. falls below 3.0. There shall be no two consecutive grace periods.

**PERMANENT MEMBER**
A permanent member is any person who has completed a minimum of 60 semester units or quarter equivalent units of college courses, with a minimum 30 units completed at a community college. A member must apply for permanent membership and meet either of the following requirements:

a. A person who has maintained a cumulative G.P.A. of 3.5 or better in all recognized college work and has been a member of AGS, Inc., for at least one term.

b. Any continuing member who has maintained a cumulative G.P.A. of 3.25 or better in all recognized college work and has been a member of AGS, Inc., for at least two terms.

Any courses completed two years or more prior to application for permanent membership, whether at a community college or other institution, shall not be used to prohibit any person from becoming a permanent member, provided that these units not be used to meet the minimum requirement of 60 semester units.

**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.

**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.

**ACTIVITY 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.

Part-time Falcons are also awarded to students enrolled in less than ten units, for leadership and service.

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

**ACTIVITY GROUP AWARDS**

The Associated Students recognizes and rewards various activity groups on campus, such as: Intercollegiate athletics, Band, Forensics, Talon Marks, Wings Magazine, Theatre, Choir, Song and Yell Squad and Honor Society. In addition to these, clubs and organizations are also recognized and honored for their service and participation in the various programs.

**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, lifetime passes, and watches/rings for State Championships.

**ACADEMIC EXCELLENCE AWARDS**

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

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

**RETENTION AWARDS PROGRAM**

For details see page 15.
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 individual's need and resources.

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

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

Financial aid applications are available year round. Students applying for Federal financial aid must have a high school diploma or equivalent.

When applying for financial aid, students must submit official academic transcripts from ALL colleges/universities attended. These transcripts must be sent to the Office of Admissions and Records. Students need to have transcripts evaluated by the Counseling department. This should be requested at the beginning of the financial aid process. Without this information, it may delay the completion of a student's file, or cause to close a student's file.

The Financial Aid Office will pay for units enrolled up to 70 degree applicable 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). Again, it is important to have ALL academic transcripts be sent to the college and evaluated as soon as possible because it may affect a student's financial aid eligibility.

Students must take the Assessment Battery Test, complete the financial aid supplemental forms, and schedule an appointment with an academic counselor to prepare a pre-plan each semester. Students must also enroll in at least 6 units of courses recommended by their counselor, which leads to a certificate, associate degree, or transfer major. Also, a 2.0 cumulative grade point average must be maintained for all college work to be eligible for financial aid. All students on financial aid must meet the satisfactory academic standards outlined in the Financial Aid Satisfactory Academic Progress (SAP) Standard brochure.

Since the application process is a lengthy one, sometimes taking up to 3 months, students should plan ahead to have sufficient funds to cover enrollment fees, parking fees, student ID., health services fees, books and supplies.

Pell Grant checks are mailed three times a semester to students. Disbursements will take place (approximately) the first, fourth, and twelfth week of the Fall and Spring terms.

For more details on financial aid, students are encouraged to contact the Financial Aid Office at (562) 860-2451, extension 2397, or stop by the office for more information.

FEDERAL PROGRAMS

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

Approximately four weeks after a student has mailed his/her application, a Student Aid Report (SAR) should arrive at your home. This report MUST be submitted directly to the Financial Aid Office to initiate your file.

Federal Supplemental Educational Opportunity Grant (FSEOG) is a campus based program with limited funding. This program is awarded by the school for students who have an exceptional need and have an expected family contribution (EFC) of 0.

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

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

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

Both entrance/exit counseling are requirements of the Federal Family Educational Loan (FFEL) Program. Students must maintain at least half-time enrollment status to receive the funds. Once you have received your loan funds, you must maintain at least half-time enrollment to avoid going into repayment. You also must maintain reasonable progress toward your certificate or degree.

Any student who is interested in the second loan, the Stafford Additional Unsubsidized loan ($4,000), must be an independent student and appeal to the Financial Aid Advisory Committee (FAAC). Appeal forms are available at the Financial Aid Office. In reviewing a request for any loan, the Financial Aid Advisory Committee may use "professional judgement" to deny a student 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.

Please refer to the Student Loan Default Management Plan available at the Financial Aid Office for additional information, or Edfund's On-Line Web site at http://www/edfund.org/home.html.

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

BIA grants are not awarded automatically. It is important that you apply early to meet the deadlines set by the BIA. You cannot apply directly through the Financial Aid Office. All BIA applicants must also complete the Application for Federal Student Aid. You must request the BIA Grant Application from your tribe.

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.

Cal Grant A awards are for students who plan to attend a four-year college or university and are based on academic achievement as well as financial need. You may apply for a Cal Grant A while you are attending Cerritos College. If you are awarded one, you may place it on reserve until you transfer to a four-year college. This grant is renewable for up to three years, provided you remain eligible.

Cal Grant B awards are for students who plan to attend a community college and are based on academic achievement as well as financial need. You may apply for a Cal Grant B while you are attending Cerritos College. If you are awarded a Cal Grant B, you may apply for a Cal Grant A while you are attending a four-year college or university. If you are awarded a Cal Grant A, you may place it on reserve until you transfer to a community college. This grant is renewable for up to three years, provided you remain eligible.

Cal Grant C awards are for students who are 18-21 years of age and are enrolled in full-time attendance at a community college or university. You may apply for a Cal Grant C while you are attending a community college. If you are awarded a Cal Grant C, you may apply for a Cal Grant A while you are attending a four-year college or university. If you are awarded a Cal Grant A, you may place it on reserve until you transfer to a community college. This grant is renewable for up to three years, provided you remain eligible.

Each of the above-mentioned grants are awarded (except Federal) based upon the student's Expected Family Contribution (EFC), the number of units completed and the cost of attendance.

Cal Grant D awards are for students who are 18-21 years of age and are enrolled in full-time attendance at a community college. You may apply for a Cal Grant D while you are attending a community college. If you are awarded a Cal Grant D, you may apply for a Cal Grant B while you are attending a four-year college or university. If you are awarded a Cal Grant B, you may apply for a Cal Grant A while you are attending a four-year college or university. If you are awarded a Cal Grant A, you may place it on reserve until you transfer to a community college. This grant is renewable for up to three years, provided you remain eligible.

Cal Grant E awards are for students who are 18-21 years of age and are enrolled in full-time attendance at a community college. You may apply for a Cal Grant E while you are attending a community college. If you are awarded a Cal Grant E, you may apply for a Cal Grant B while you are attending a four-year college or university. If you are awarded a Cal Grant B, you may apply for a Cal Grant A while you are attending a four-year college or university. If you are awarded a Cal Grant A, you may place it on reserve until you transfer to a community college. This grant is renewable for up to three years, provided you remain eligible.
Grant A pays all or a portion of tuition and fees at your designated four-year institution. Cal Grant A provides no funds for books, living costs, transportation expenses and provides no funds for fees at the community college.

Cal Grant B awards assist middle and low-income college students with living expenses, books, supplies, transportation and other non-tuition costs. Renewal may cover tuition/fee costs. The maximum award at Cerritos College is approximately $1,548 per year.

Cal Grant C awards are for community college students only and assist low to middle-income students with tuition and vocational training costs. You must be in a vocational study program that is four months to two years in duration. The maximum award at Cerritos College is approximately $576 per year. This grant is renewable for up to two or three years, provided you remain eligible. For more information, visit the California Student Aid Commission website at 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), and learning communities in the Achievement in Mathematics (AIM) program, and Summer Bridge program. All three programs involve social and academic integration activities for students outside of the classroom. Courses in these programs are taught by a faculty member and faculty counselor.

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

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

Board of Governors Grant (BOGG) is a program that provides assistance to cover community college enrollment fees. To be eligible, you must be a California resident and must qualify under one of the following conditions:
1. You or your parents must currently be receiving Aid to Families with Dependent Children (AFDC), Supplemental Security Income (SSI) or General Relief. Documentation is required; or
2. You must meet income standards based on your family size. Documentation is required; or
3. You must have already applied for federal/state aid 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 which 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.

**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, New G.I. Bill-Selected Reserve, VEAP, Vocational Rehabilitation, or Survivors and Dependents of deceased or disabled veterans.

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

Veteran Affairs Office service hours are determined on a semester by semester basis. Service hours are posted at the Veteran Affairs counter or students can call (562) 860-2451, extension 2104 for information. The Veteran Affairs Office is located in the Admissions and Records Office in the Administration building.
Associate in Arts Degree

Graduation Requirements

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

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

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

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

REQUIREMENTS FOR THE ASSOCIATE IN ARTS DEGREE:

SCHOLARSHIP AND RESIDENCE

A. A student must complete 60 units of degree applicable work with a grade point average of “C” or better (2.0) in all courses counted for the degree.

B. A student must achieve a grade point average of “C” or better (2.0) in all course work that is attempted for the major.

C. A minimum of 12 units of degree applicable work must be completed at Cerritos College.

D. The student must be in attendance for the semester in which the degree is earned. Exception to this requirement is by petition only.

PETITION FOR ASSOCIATE IN ARTS DEGREE

1. Students desiring an Associate in Arts Degree must file a “Petition for Associate in Arts Degree” form. The petition may be obtained in the Counseling Center and must be submitted before the deadline posted in the College calendar. The petition must be approved and validated by a counselor and the Admissions and Records Office before the degree will be granted.

2. The date on the degree will correspond to the year the degree is earned.

3. Students not in continuous attendance at Cerritos College must meet degree requirements for graduation in effect at the time of readmission.

4. A student is considered in continuous attendance if he/she receives a grade (A, B, C, D, F, CR, NC, 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.)

5. 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.

6. There will be a fee charged for any degree granted when the petition is filed after the established deadline.

STUDENTS WITH BACCALAUREATE DEGREES

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

ADDITIONAL ASSOCIATE IN ARTS DEGREES

Once an A.A. has been obtained, no additional degree may be obtained in General Studies. An additional General-Divisional A.A. Degree may not be obtained if a specific degree has been awarded previously within the same division. Otherwise, a student may earn an additional A.A. Degree by meeting the following conditions:

1. Complete a minimum of seventy-eight (78) units - eighteen (18) degree applicable units beyond the minimum required for the first A.A. Degree. The minimum 78 units must meet the requirements in a different major curriculum. All general education requirements in effect at the time continuous attendance began must be met.

2. If some or all of the major curriculum requirements for the second A.A. Degree were met in the first A.A. Degree and the minimum seventy-eight (78) degree applicable units is not achieved, then additional courses will be planned with a counselor to make up the difference as described in the procedures. The general education requirements must be met which were in effect at the time continuous attendance began.

3. Upon completion of the required course work, follow the "Petition for Graduation" procedures as detailed for the first A.A.

4. Additional A.A. Degrees may be granted for each eighteen (18) degree applicable additional units completed. For example a third A.A. degree may be earned upon the completion of a minimum of ninety-six (96) units. The requirements to obtain additional degrees are the same as those stated above for a second A.A. Degree.

COMMENCEMENT

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

All graduating students are encouraged to participate in the Commencement ceremony which honors their industry and achievement.

CERTIFICATES OF ACHIEVEMENT

Cerritos College is authorized to award a Certificate of Achievement to any student who satisfactorily completes an organized curriculum 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 courses outside the major designated as requirements in the curriculum pattern.

3. A minimum of twelve (12) units of course work within the certificate must be taken at Cerritos College if Certificate of Achievement is to be awarded by this institution.

4. Upon completion of required course work, file a “Petition for Certificate of Achievement” form. The petitions are available in the
Counseling Center.
5. Units earned toward the Certificate of Achievement may be applied toward an Associate in Arts Degree.
6. Credit toward the Certificate of Achievement is not granted for classes taken as part of the Adult Education Program.

COLLEGE BOUND PROGRAM

As an institution of higher learning, Cerritos College is deeply committed to providing students with the best opportunity for achieving their educational and career goals. Cerritos College recognizes that the needs of students are as diverse as the ethnic and socio-economic make-up of the community.

Through the "College Bound" program, the opportunity is provided for district high schools to offer college courses to their students on high school campuses. Whether the goal of the student is to transfer to a university setting or to prepare for a career, the "College Bound" program has course offerings to meet every need.

"College Bound" brings Cerritos College courses to high school sites. Courses are taught by instructors who are employed by Cerritos College and who meet the academic qualifications required by the specific subject area. "College Bound" aims to provide as many services as possible at a high school site. Registration, assessment testing, and textbooks are brought to your campus.

For additional information, please call (562) 860-2451, extension 2482.
Cerritos College General Catalog

Associate in Arts Degree
Unit Requirements For Graduation 2001-02

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

1. MAJOR PROGRAM REQUIREMENTS:
   Complete all requirements for the chosen major program under "Major Requirements" in the Cerritos College Catalog. For a "General" Division major, 18 units are required.

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

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

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

5. GENERAL EDUCATION REQUIREMENTS: 21-27 UNITS
   Complete the following course requirements as indicated.
   a. NATURAL SCIENCES AND HEALTH EDUCATION: 6 UNIT MINIMUM
      Select one course from each of the three groups listed below:
      (1) PHYSICAL SCIENCES
         Astronomy 101,102,103,105L (LAB),106
         Chemistry 100 (LAB),110 (LAB),111 (LAB)
         Earth Science 101,101L (LAB),104,106,110 (LAB)
         Energy 110
         Geography 101
         Geology 101 (LAB),110,201 (LAB),204,207 (LAB),209 (LAB)
         Physical Science 100,112
         Physics 50 (LAB),100 (LAB),101 (LAB),201 (LAB)
      (2) BIOLOGICAL SCIENCES
         Anatomy and Physiology 120 (LAB),130 (LAB),200 (LAB)
         Anthropology 115
         Biology 105,110 (LAB),115 (LAB),120 (LAB),201 (LAB)
         Botany 120 (LAB)
         Microbiology 200 (LAB)
         Psychology 241
         Zoology 120 (LAB)
      (3) HEALTH EDUCATION
         Health Education 100
   b. SOCIAL AND BEHAVIORAL SCIENCES: 3-9 UNITS
   Select one course from each of the groups listed below:
   Examination Option. The History and Political Science requirements may be satisfied by proficiency examinations. If both exams are passed, the student is required to select three units from b-3 below.
   NOTE: Completion of a U.S. history or government course which fulfills the California State University requirement taken at any accredited institution may be used in lieu of the course requirement.
   (1) History 101,201,202,220,221
      (This requirement can be met by successfully passing the departmentally administered and evaluated proficiency examination for American History, or receiving a score of 3 or better on the Educational Testing Services' Advanced Placement Exam, American History, or the Education Testing Services' College Placement Test, American History and Social Studies. Unit credit is awarded for passing the AP exam option. Unit credit is not awarded for the departmental exam and only applies to the A.A. degree.)
   (2) Political Science 101 or 201
      (This requirement can be met by successfully passing the departmentally administered and evaluated proficiency examination for American Government or the Educational Testing Services Advanced Placement exam with a score of 3 or better. Unit credit is awarded for this option. Unit credit is not awarded for passing this department exam option.)
   (3) Administration of Justice 101
      Administration of Justice 101
      Anthropology 100,120,200,201,202,203
      Child Development/Early Childhood 113
      Counseling and Guidance 200
      Economics 101,102,201,202,204
      Geography 102,105,257
      History 110,120,210,230,241,242,245,246,250,255,257,260,265,270
      Political Science 110,210,220
      Psychology 101,150,251,261
      Speech 110
      Women's Studies 101
   c. FINE ARTS AND HUMANITIES: 6 UNIT MINIMUM
      Select one course from each of the groups listed below:
      (1) FINE ARTS
         Architecture 110,112
         Art 100,101,102,103,106,107,110
         Journalism 100
         Music 100,101,102,103,104,104B,105
         Photography 100
         Physical Education 191
         Theatre 101,102,103,104,150,151,152,159
      (2) HUMANITIES
         French 101,102,201,202
         German 101,102,201,202
         Humanities 100,104
         Japanese 101,102,201,202
Philosophy 100,102,104,200,201,204,206
Sign Language 101,102
Spanish 101,102,111,112,201,202,206,210,245
Speech 140,145

d. LANGUAGE AND RATIONALITY: 6 UNIT MINIMUM
Select one course from each of the groups listed below:

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

(2) COMMUNICATION AND ANALYTICAL THINKING
   Business Communication 148
   Computer and Information Sciences 52,101,102,103,177,178
   Drafting 131
   English 103
   Mathematics 60, 70, 80, 80A, 100, 110A, 110B, 112, 114, 115, 116, 140,150,170
   Philosophy 106,202
   Psychology 103,210
   Reading 200
   Speech 60,100,120,130,132,150,235,271
   Technical Mathematics 50

NOTE: The preceding graduation requirements apply to students who were in attendance during the 2001-02 school year and thereafter. Students who enrolled prior to Fall 2001 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.
Transfer Requirements

Students planning to transfer to a four-year college or university should be aware 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. Also, a large collection of such publications are available in the Transfer Center. In addition to offering transfer information to public and private colleges and universities statewide and national, we are continuing our efforts to obtain articulation agreements for transferring to Historically Black Colleges and Universities (HBCU’s). To assure that appropriate transfer course work is being undertaken at Cerritos College, students should plan to communicate regularly with the counseling staff.

THE CALIFORNIA STATE UNIVERSITY

High School Preparation and Admission Requirements

Freshman Requirements — You will qualify for regular admission as a first-time freshman if you
1. are a high school graduate,
2. have a qualifiable eligibility index, and
3. have completed with grades of “C” or better the courses in the comprehensive pattern of college preparatory subject requirements.

Subject Requirements — The California State University requires that first-time freshmen complete, with grades of “C” or better, a comprehensive pattern of college preparatory study totaling 15 units. A “unit” is one year of study in high school.

English, 4 years
Mathematics, 3 years: algebra, geometry, and intermediate algebra
U.S. History or U.S History and government, 1 year
Science, 1 year with laboratory: biology, chemistry, physics, or other acceptable laboratory science
Foreign language, 2 years in the same language (subject to waiver for applicants demonstrating equivalent competence)
Visual and performing arts, 1 year: art, dance, drama/theater, or music
Electives, 3 years: selected from English, advanced mathematics, social science, history, laboratory science, foreign language, visual and performing arts, and agriculture.

ACCEPTANCE OF TRANSFER COLLEGE CREDIT

A student who presents an official transcript of previous college or university work (not non-degree applicable course work) in courses comparable to those of Cerritos College may receive credit towards the associate in arts degree from Cerritos College. Before credit can be granted, the course work must have been completed at a college or university that is a member of one of the six regional accrediting associations. Official transcripts must be on file with the Admissions and Records Office. Hand-delivered copies of transcripts are accepted; 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 equals approximately 3 semester units.)

Cerritos College is authorized to enroll international students and welcomes applications from such persons. All records of any previous schooling (mark sheets, transcripts, diplomas, certificates, etc.) must be submitted as original documents. These records must show courses taken and grades earned, and must be translated into English if the original records are in another language. If a translation is supplied, it should be certified as accurate and correct by an appropriate public or school official, or sponsoring agency or government. The original record should also be included.

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

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

International students also refer to Admissions of International 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

TRANSFER REQUIREMENTS

Lower Division Transfer Requirements — If you have completed fewer than 56 transferable semester (84 quarter) units, you will qualify for admission if you have a grade point average of 2.0 (C) or better in all transferable units attempted, are in good standing at the last college or university attended, and meet the admission requirements for first-time freshmen, i.e., you have completed with a grade of “C” or better each of the courses in the comprehensive pattern of college preparatory subject requirements and have a qualifiable eligibility index. If you did not complete all the subject requirements in high school, appropriate college courses may be used to make up the missing subjects. Nonresident must meet the eligibility index for nonresidents.

Upper Division Transfer Requirements — If you have completed at least 56 transferable semester (84 quarter) units, have a grade point average of 2.0 (C) or better in all transferable units attempted (nonresidents must have a grade point average of 2.4), and are in good standing at the last college or university attended, you may become eligible one of two ways:

1. You have completed at least 30 semester (45 quarter) units of college courses with a grade of C or better in each course to be selected from courses in English, arts and humanities, social science, science and mathematics at a level at least equivalent to courses that meet general education requirements. The 30 semester (45 quarter) units must include all of the general education requirements in communication in the English language (at least 9 semester or 12 quarter units to include written communication, oral communication, and critical thinking) and mathematics (at least 3 semester or 4 quarter units) or, if completing the Intersegmental General Education Transfer Curriculum, English communication (at least 9 semester or 12 quarter units in English composition, oral communication, and critical thinking) and the requirement in mathematics (at least 3 semester or 4 quarter units).

2. You have completed all subject requirements required for first-time freshmen. If you did not complete all the subject requirements in high school, appropriate college courses may be used to make up the missing subjects.

For upper division transfers seeking admission to the fall term 2000 or later, the second option will not be available to establish eligibility for admission. All applicants with 56 or more transferable
semester (84 quarter) units will be required to have completed at least 30 semester units of courses at a level equivalent to courses that meet general education requirements. The 30 semester units must include all of the general education requirements in communication in English language (3 courses) and at least the three semester units (typically 1 course) required in mathematics.

For upper division transfers seeking admission to the fall term 2000 or later, the second option will not be available to establish eligibility for admission. All applicants with 56 or more transferable semester (84 quarter) units will be required to have completed at least 30 semester units of courses at a level equivalent to courses that meet general education requirements. The 30 semester units must include all of the general education requirements in communication in English language (3 courses) and at least the three semester units (typically 1 course) required in mathematics.

Applicants who graduated from high school in 1987 or earlier who have not completed the subject requirements in (1) and (2) above should contact the admission office at the campus to which they plan to submit an application for admission to inquire about alternative admission programs.

Test Scores— Freshman and transfer applicants who have fewer than 56 semester or 84 quarter units of transferable college credit must submit scores, unless exempt, from either the Scholastic Aptitude Test (SAT) of the College Board or the American College Testing Program (ACT). If you are applying to an impacted program and are required to submit test scores, you should take the test no later than December if applying for fall admission. Registration forms and dates for the SAT or ACT are available from school or college counselors or from a campus testing office. Or you may write to:

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

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

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

Freshman: The campus to which you are applying will provide a list of courses that must be taken to meet the general education requirements. Freshman applicants should check to see if they have completed courses equivalent to those listed.

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

General Education Requirements for the Bachelor’s Degree at the California State University

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

Cerritos College is further authorized to certify the partial or complete fulfillment of these requirements.

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 better is required in Oral Communication, Written Communication, Critical Thinking, and Mathematical Concepts.

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 103, Philosophy 106, 108, Psychology 103, Speech 235

B. NATURAL SCIENCE AND MATHEMATICS: 9 units minimum.

Choose one course from category 1, one course from category 2 and one course from category 3. At least one laboratory (LAB) must be included in category 1 or category 2.

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

2. BIOLOGICAL SCIENCES
   Anatomy and Physiology 120 (LAB), 130 (LAB), 200 (LAB)
   Anthropology 115
D. SOCIAL SCIENCES:

E. SELF-DEVELOPMENT:

C. FINE ARTS AND HUMANITIES:

1. FINE ARTS
- Architecture 112
- Art 100,101,102,103,106,107,110
- Music 100,101,102,103,104,104B,105
- Photography 100
- Physical Education 191
- Theatre 101,102,103,104,150,151,152,159

2. HUMANITIES
- English 102,106,221A,221B,222,223,224,225,226,227,228,
- French 101,102,201,202
- German 101,102,201,202
- Humanities 100,104
- Japanese 101,102,201,202
- Philosophy 100,102,104,200,201,204,206
- Sign Language 101
- Spanish 101,102,111,112,201,202,206,210
- Speech 140

3. MATHEMATICAL CONCEPTS
- Psychology 210

C. FINE ARTS AND HUMANITIES: 9 units minimum.
Choose at least one course from category 1, one course from category 2, and one course from category 3.

1. AMERICAN HISTORY
- History 101,201,202,220,221
  (Any one of these courses meet the requirement in U.S. History)

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

3. SOCIAL, POLITICAL, HISTORICAL AND ECONOMIC INSTITUTIONS
- Administration of Justice 101
- Anthropology 100,120,203
- Economics 101,102,201,202,204
- Geography 102,105,257
- History 110,120,210,230,241,242,245,246,250,257,260,265
- Political Science 110,210,220
- Psychology 101,251,261
- Sociology 101,201,210,215,230
- Speech 110
- Women's Studies 101

E. SELF-DEVELOPMENT: 3 units minimum

- Counseling and Guidance 200
- Health Education 100
- Physical Education 141
- Psychology 150
- Sociology 110,120

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

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

TRANSFERABLE COURSES TO THE CALIFORNIA STATE UNIVERSITIES

In compliance with Title 5 of the California Administrative Code, the following courses have been certified by Cerritos College as being of baccalaureate level for the current school year and as such are transferable to any campus of the California State University.

The transfer institution, however, will determine whether courses from the list satisfy the requirements of a particular degree program or will be acceptable as general electives to the extent that the particular degree objective permits.

Students are urged, therefore, to refer to the courses listed under the General Education Requirements for the Bachelor's Degree, and to the lower division requirements for their major program.

Administration of Justice 101, 102,103,104,105,110,130,150, 173, 202,208,220,221,222,296,299
Anatomy and Physiology 120,130,200,201,298,299
Anthropology 100,101,115,120,200,201,202,203,250,251,298,299
Architecture 110,111,112,113,121,122,123,211,212,213,221,222,
298,299
Art 100,101,102,103,105,106,107,110,111,112,115L,116,117,120,
121,130A,130B,133A,133B,134,135,136,144,145,150,151,152,
155,156L,160,162,163,170,171,180,181,182A,182B,183,183A,
183B,184,185,186,188,189L,192,194,195,196,197,213,214,
218,219,231,232,237,238,239,246,248,252,253,255,264,270,
271,284,285,287A,287B,287,298,299
Astronomy 101,102,103,105L,106,298,299
Auto body 181,182,183,285,287
Business Paralegal 100,101,102,103,104,105,106,107,108,109,112,
242,243,245L,280
Business Accounting 100,101,102,130,131,133,134,171,172,173,
Business Administration 52,100,101,102,104,105,106,107,108,110,
111,112,113,114,115,117,118,119,120,121,123,149,171,172,
173,174,200,201,203,206,207,298,299
Business Communications 147,148,150,151,152
Business Computerized Office Technologies 108,110,112,114,116,
120,131,133,134,135,155,161,162,163,173,174
Business Court Reporting/Computerized Shorthand 113,114,115,
116,118,119A,119B,119C,119D,119E,119F,125,126,127,128,
129,130,139,140,141,142,143,144,145,146,147,148,149,152,
153,154,155,156,157,158,159,173/174,180,181,185,190,191,
192,193
Business Finance 125,126,298,299
Business Paralegal 100,101,102,103,104,105,106,107,108,109,112,
Business Real Estate 100,120,125,130,131,140,151,157,160,172,
173,174
Chemistry 100,105,110,111,112,205,211,212,250,298,299
Child Development 110,115,124,137,138,298,299
Child Development/Early Childhood 64,111,112,113,133,134A,
134B,134C,173,174,230,298,299
Child Development School Age 152,155,259,298,299

Cerritos College General Catalog
Minimum Admission Requirements

To be eligible for admission to the University, you must meet the Subject, Scholarship, and Examination Requirements described below. There is also an explanation of how you may qualify for admission by examination alone.

*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.

SUBJECT REQUIREMENT

To satisfy this requirement, you must complete the high school courses listed below with a grade point average defined by the Scholarship Requirement. This sequence of courses is also known as the "a-f" requirements.

You must take 15 units of high school courses to fulfill the...
Subject Requirement, and at least 7 of the 15 units must be taken in your last two years of high school. (A unit is equal to an academic year, or two semesters, of study.)

Applicants from California high schools: To be acceptable to the University, the courses must appear on a list certified by your high school principal as meeting the University's admissions requirements. Your counselor or principal will have a copy of this list.

a. History/Social Science—2 years required.
   Two years of history/social science, including one year of U.S. history or one-half year of U.S. history and one-half year of civics or American government; and one year of world history, cultures, and geography.

b. English—4 years required.
   Four years of college preparatory English that include frequent and regular writing, and reading of classic and modern literature. Not more than two semesters of ninth grade English can be used to meet this requirement.

c. Mathematics—3 years required, 4 years recommended.
   Three years of college preparatory mathematics that include the topics covered in elementary and advanced algebra and two and three dimensional geometry. Approved integrated math courses may be used to fulfill part or all of this requirement, as may math courses taken in the seventh and eighth grades that the high school accepts as equivalent to its own courses.

d. Laboratory Science—2 years required, 3 years recommended.
   Two years of laboratory science providing fundamental knowledge in at least two of these three disciplines: biology (which includes anatomy, physiology, marine biology, aquatic biology, etc.), chemistry, and physics. Laboratory courses in earth/space sciences are acceptable if they have as prerequisites or provide basic knowledge in biology, chemistry, or physics. The appropriate two years of an approved integrated science program may be used to fulfill this requirement. Not more than one year of ninth grade laboratory science can be used to meet this requirement.

e. Language other than English—2 years required, 3 years recommended.
   Two years of the same language other than English. Courses should emphasize speaking and understanding, and include instruction in grammar, vocabulary, reading, and composition. Language other than English courses taken in the seventh and eighth grades may be used to fulfill part of this requirement if the high school accepts them as equivalent to its own courses.

f. College Preparatory Electives—2 years required.
   Two years (four semesters), in addition to those required in "a-e" above, chosen from the following areas: visual and performing arts, history, social science, English, advanced mathematics, laboratory science, and language other than English (a third year in the language used for the "e" requirement or two years of another language).

Scholarship Requirement

The Scholarship Requirement defines the grade point average (GPA) you must attain in the "a-f" subjects to be eligible for admission to the University.

If your GPA is 3.3 or higher, you have met the minimum requirement for admission to the University. If your GPA is below 3.3 but above 2.77, you have met the minimum requirement if you achieve the college entrance test score indicated on the Eligibility Index.

The University calculates your GPA in the "a-f" subjects by assigning point values to the grades you earn, totaling the points, and dividing the total by the number of "a-f" course units. Points are assigned as follows: A 4 points, B 3 points, C 2 points, D 1 point, and F 0 points.

Only the grades you earn in "a-f" subjects in the 10th, 11th and 12th grades will be used to calculate your GPA. Courses you take in 9th grade can be used to meet the Subject Requirement if you earn a grade of "C" or better, but they will not be used to calculate your GPA.

Honor Courses

The University assigns extra points for up to four units of certified honors level and advanced placement courses taken in the last two years of high school: A 5 points, B 4 points, C 3 points, D 1 point. Grades are not considered in these calculations and receive one point only.

The courses must be in the following "a-f" subjects: history, English, advanced mathematics, laboratory science, and foreign language, and must be certified at your high school as offered at the honors level. In these fields, as well as in the fields of computer science, social science, and the visual and performing arts, courses that are designed to prepare students for an Advanced Placement Examination of the College Board and college courses that are transferable to the University are acceptable honors level courses.

D and F Grades

D and F grades in the "a-f" courses must be repeated. In mathematics, foreign language, and chemistry only, a grade of C or better in more advanced coursework may validate D and F grades in earlier work. Consult with your counselor to determine how these grades can be improved and how the university will use them in evaluating your scholarship record.

Grades will not be used for repeated courses in which you initially earned a grade of "C" or better.

<table>
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<th>Eligibility Index</th>
<th>&quot;a-f&quot;</th>
<th>ACT1 Composite</th>
<th>SAT2 Total</th>
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1. ACT is scored in intervals of 1 point, from a minimum of 1 to a maximum of 35.
2. SAT is scored in intervals of 10 points, from a minimum of 400 to a maximum of 1600.

EXAMINATION REQUIREMENT

All freshman applicants must submit the following test scores:
- One aptitude test, either the Scholastic Aptitude Test (SAT) or the American College Test (ACT). The verbal and mathematics scores on the SAT must be from the same sitting. The ACT composite score must be submitted.
- Three College Board Achievement Tests (ACH), including English Composition, Mathematics Level 1 or Level 2, and one test in one of the following areas: English literature, foreign language, science, or social studies.

ADMISSION BY EXAMINATION ALONE

If you do not meet the Subject and Scholarship Requirements, you may qualify for admission to the University by examination.

To satisfy the minimum requirements for qualifying by examination alone, you must achieve a total score of 1100 or higher on the SAT, or a composite score of 26 or higher on the ACT. In addition, you must earn a total score of 1650 or higher on the three College Board Achievement Tests, with a minimum score of 500 on each test.

You cannot qualify for admission by examination alone if you have completed 12 or more units of transferable coursework at another college or university following high school graduation, or if you have taken transferable college courses in any subject covered by the College Board Achievement Tests.

NONRESIDENTS

The minimum freshman admission requirements for nonresidents of California are the same as those for residents except for the following:

Scholarship Requirement: Your grade point average in the "a-f" subjects must be 3.4 or higher, regardless of your college entrance examination score. The Eligibility Index is used only for California residents.

Admission by Examination Alone: You must score at 1100 on the SAT or 26 on the ACT. Your total score on the three College Board Achievement Tests must be at least 1730, with a minimum score of 500 on any single test.

UNIVERSITY OF CALIFORNIA

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

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

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

The University publishes a booklet especially for transfer applicants called Answers for Transfers. It is available from your community college counselor.

CALIFORNIA RESIDENTS

There are basically three ways in which you can meet the University's minimum admission requirements for transfer students. These requirements are described below. In all cases, you must have at least a "C" (2.0) average in all transferable coursework.

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

1. If you were eligible for admission to the University when you graduated from high school--meaning you satisfied the Subject,* Scholarship, and Examination Requirements---you are eligible to transfer if you have a "C" (2.0) average in your transferable college coursework.

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

3. If you were not eligible for admission to the University when you graduated from high school because you did not meet the Scholarship Requirement, or you did not meet the Scholarship Requirement and did not complete all the required "a-f" subjects,* you must:
   a. Complete 90 quarter units or 60 semester units of U.C. transferable college credit with a grade point average of at least 2.4, and
   b. Complete a course pattern requirement to include:
      1. Two transferable college courses (3 semester or 4-5 quarter units each) in English composition; and
      2. One transferable college course (3 semester or 4-5 quarter units) in Mathematical Concepts and Quantitative Reasoning; and
      3. Four transferable college courses (3 semester or 4-5 quarter units each) chosen from at least two of the following subject areas: the arts and humanities, the social and behavioral sciences, the physical and biological sciences.

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

NONRESIDENTS

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

TRANSFERABLE COURSES TO UNIVERSITY OF CALIFORNIA

Please see your counselor or the Transfer Center Coordinator for all courses that have been accepted by any campus of the University of California as transferable for the 2001-02 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 and has replaced the University of California Transfer Core Curriculum.

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. The General Education Certification Requirements are still in effect and may be followed by both continuing and new students who plan to transfer to a California State University.

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

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

The course requirements for ALL areas must be completed PRIOR to transferring to the CSU or UC in order for the IGETC to be certified. However, beginning Fall 2000 a student may be partially certified if they are missing no more than 2 courses and they are able to show good cause for not having the missing courses completed. The missing courses may only be from areas 3, 4, 5, or language other than English. Areas 1 and 2 must be completed in all cases. See your counselor to determine eligibility for partial certification. All courses must be completed with a grade of “C” or better any of the courses listed in IGETC area 2 except Math 10. Completion of an IGETC Area 2 course (except Math 10) will meet both the UC math admissions and IGETC area 2 requirements. Completion of Math 10 will meet only the IGETC area 2 requirement, not the UC math admissions requirement. See a counselor for other ways to meet the UC math admissions requirement.

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

Arts 100,101,102,103,106,110
Music 100+,101,103,104,104B, 105
PE 191
Theatre 101,102,103,104,150,159

B) Humanities

French 201,202
German 102,201,202
Humansities 100
Japanese 102
Philosophy 100,102,104,200,201,204,206
Spanish 102+,112+,201,202,210

AREA 4 SOCIAL AND BEHAVIORAL SCIENCES

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

Anthropology 100,120,200
Economics 101+,102,201,202+
Geography 102,105
History 101+,110,120,201,202+,220,201,221,230,240,241,242,245,246,250+,255,260,265
Political Science 101+,201,210+,220,230
Psychology 101,150,251,261,271
Sociology 101,120,201,210,215
Speech 110
Women’s Studies 101

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

AREA 1 ENGLISH COMMUNICATION

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

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

English 100

B) Critical Thinking-English Composition
(1 course, 3 semester/4-5 quarter units)

English 103

Philosophy 202

Psychology 103

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+

ATTENTION UC BOUND STUDENTS

Three years of high school level mathematics (algebra, geometry, advanced algebra) or equivalent are required for admission to a University of California campus. Transfer students entering the UC fall 1994 and later who have not completed this requirement in high school may meet this requirement by completing, with a grade of "C" or better any of the courses listed in IGETC area 2 except Math 10. Completion of an IGETC Area 2 course (except Math 10) will meet both the UC math admissions and IGETC area 2 requirements. Completion of Math 10 will meet only the IGETC area 2 requirement, not the UC math admissions requirement. See a counselor for other ways to meet the UC math admissions requirement.
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/9-11 quarter units)

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

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

ADDITIONAL REQUIREMENTS
A) UC ONLY: Language other than English
   There are several ways to satisfy this requirement. They include:
   a) Complete two years of the same foreign language in high school
      with a grade of "C" or better.
   b) Complete first college course in any foreign language, or Sign
      Language 101.
   c) Earn a minimum score of 550 on an appropriate College Board
      Achievement Test in a foreign language.
   d) For other options, see your counselor.

B) CSU ONLY: The CSU has a specific American Institutions requirement
   that is separate from the general education requirements. Courses used to
   meet the American Institutions requirement may NOT be used to satisfy
   requirements for the IGETC. It is recommended that this requirement be
   met prior to transfer. The following will meet the CSU American Institutions requirement.
   6 units, one course from Group 1 and one course from Group 2.
   Group 1: History 101+, 201+, 202, 220, 221+
   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. For details, see your counselor.
COMMUNITY, INDUSTRY AND TECHNOLOGY EDUCATION

Dedicated to serving the community through excellence in teaching and support services.

The Community Education’s programs encompass that community college function which goes beyond traditional transfer, vocational and general education programs to instill concepts of lifelong learning in the general population. Community Education provides classes, activities, workshops and programs to meet the varied needs of our diverse community, from the very young in the College for Children and Young Scholars programs to our seniors in the Emeritus program. All Community Education courses-career development, work for training and retraining, cultural enrichment, and civic literacy-are educational; their overall goal is to impart knowledge, develop skills, and clarify values. The general approach or delivery is one that provides participants with access to quality programs in a format that blends education with work and leisure throughout life.

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

SEMINARS FOR PROFESSIONALS/CERTIFICATE OF COMPLETION:

Business and Sales Computer Training-Financial Planning-Realtor
Estate-Makeup Design-Fingernail Art-EMT Recertification-Coronol
Polish-Health Professions-Personal Enrichment-CPR-Holistic Health-
Dance Classes-Travel/FIELD Trip Program-Driver and Motorcycle
Training-Traffic School, and our College for Children and Youth
Program. (Academics, Children’s Theatre, Music and Arts, Dance).

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

ADULT EDUCATION/DIVERSITY PROGRAMS

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

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

Educational Programs for Older Adults

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

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

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

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

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

Registration for Community Education classes is always simple-

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

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

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

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

We invite you to visit our web-site at www.cerritos.edu/ccf or you may contact the Foundation Office at (562) 860-2451, ext. 2526 for more information or to make a donation.
Students preparing to register for the Fall 2001 semester will discover an easier method to identify, select and register for the right courses to fit their educational plan.

Beginning with the Fall 2000 Class Schedule, students will find that all college courses have been renumbered. The renumbering system was adopted after studying other southland colleges who have participated in a similar process.

The following section will help returning students identify those classes that they have already taken, as well as those still necessary to achieve their individual educational goals.
Course Designation: 1 - 49
These are renumbered on departmental courses which do not apply toward the Associates in Arts (A.A.) degree and which will not transfer as degree applicable to another community college or four-year college or university.

Course Designation: 50 - 99
These courses apply toward the Associate in Arts (A.A.) degree, but are not intended for transfer to a four-year college or university.

Course Designation: 100-299
These courses count toward the Associate in Arts (A.A.) degree and are intended for transfer to a four-year college or university. Freshman-level courses are generally given numbers from 100-199, and sophomore-level courses are generally given numbers from 200-299. Courses numbered 100 through 299 are intended as lower division transferable course work. The final decision in regards to transferability rest with the institution to which the credits are transferable.

Special Studies: 49 (non-degree Special Studies)
69 (A.A. degree Special Studies)
109 (transferable Special Studies)

Directed Studies: 98 (1 unit Directed Studies)
99 (2 units Directed Studies)
298 (1 unit Directed Studies)
299 (2 units Directed Studies)

Work Experience: 73 (3 units Work Experience)
74 (4 units Work Experience)
171 (1 unit Work Experience)
172 (2 units Work Experience)
273 (3 units Work Experience)
274 (4 units Work Experience)

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The table above lists courses from various departments, including Early Childhood Education, Occupational Work Experience, Family Child Care Providers, and many others. Each course is paired with its new course number, and the course titles are listed along with their respective departments.
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73
### Course Numbering System

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CURRICULA,
REQUIREMENTS
FOR MAJORS,
CERTIFICATES AND
TRANSFER PROGRAMS
ADMINISTRATION OF JUSTICE

The following Administration of Justice Associate in Arts Degree and Certificate of Achievement programs meet guidelines established by the California Community Colleges’ Chancellor’s Office.

ALL CERTIFICATE OF ACHIEVEMENT CANDIDATES MUST COMPLETE THE FOLLOWING CORE OF COURSES SATISFACTORILY.

This program of study satisfies California P.O.S.T. REQUIREMENTS FOR PRE-LAW ENFORCEMENT EMPLOYMENT.

ADMINISTRATION OF JUSTICE—774
POST CERTIFICATE OF ACHIEVEMENT

This program of study satisfies California P.O.S.T. requirements for pre-law enforcement employment and meets guidelines established by the California Community Colleges’ Chancellor’s Office.

ALL POST CERTIFICATE OF ACHIEVEMENT CANDIDATES MUST COMPLETE THE FOLLOWING COURSES SATISFACTORILY AFTER THE FALL 1996 SEMESTER, AND A.J. DEPARTMENT APPROVAL IS REQUIRED FOR THIS CERTIFICATE.

ADMINISTRATION OF JUSTICE CORE — (26 units) UNITS
AJ 71 First Aid 3
AJ 91 Report Writing Procedures 3
AJ 101 Introduction to Administration of Justice 3
AJ 102 Concepts of Criminal Law 3
AJ 103 Criminal Procedures 3
AJ 104 Criminal Evidence 3
AJ 105 Community Relations 3
AJ 202 Substantive Law 3
AJ 208 Special Issues in Law Enforcement 3

ADMINISTRATION OF JUSTICE—775
ASSOCIATE IN ARTS DEGREE

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

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

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

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

ADMINISTRATION OF JUSTICE CORE — (21 units) UNITS
AJ 91 Report Writing Procedures 3
AJ 101 Introduction to Administration of Justice 3
AJ 102 Concepts of Criminal Law 3
AJ 103 Criminal Procedures 3
AJ 104 Criminal Evidence 3
AJ 105 Community Relations 3
AJ 202 Substantive Law 3
AJ 208 Special Issues in Law Enforcement 3

ADMINISTRATION OF JUSTICE—776
TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION UNITS
FOR THE CALIFORNIA STATE UNIVERSITY
AJ 101 Introduction to Administration of Justice 3

GENERAL RECOMMENDED ELECTIVES
PSYC 101 Introduction to Psychology 3
SOC 101 Principles of Sociology 3

LOWER DIVISION MAJOR REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS
California State University - Long Beach
Recommended Electives:
AJ 102 Concepts of Criminal Law 3
AJ 103 Criminal Procedures 3
AJ 104 Criminal Evidence 3

or PSYC 261 Social Psychology 3
SOC 101 Introductory Sociology Principles 3
or SOC 201 Introductory Sociology: Social Problems 3

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

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

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

AJ 105  Community Relations  3
AJ 202  Substantive Law  3

California State University - Los Angeles
AJ 102  Concepts of Criminal Law  3
AJ 202  Substantive Law  3

Recommended Electives:
AJ 110  Concepts of Enforcement Services  3
AJ 130  Traffic Control & Investigation  3
AJ 220  Criminal Investigation  3

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
The completion of 60 units, including the above 18 units of AJ requirements, the Associate in Arts and California State University transfer General Education requirements, qualifies the student for the AA degree in Administration of Justice and transfer to the California State University.

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

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

AGRICULTURE—655
TRANSFER PROGRAM
COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY  UNITS
BIOL 200  Principles of Biology  5
BIOL 201  Principles of Biology  5
CHEM 211  Organic Chemistry  5
CHEM 212  Organic Chemistry  5
MATH 112  Elementary Statistics  4
MATH 116  Calculus for Managerial, Biological & Social Sciences  4
MATH 140  Trigonometry  3
MATH 150  Pre Calculus Math  4
MATH 170  Analytical Geometry and Calculus I  4
MIRC 200  Introductory Microbiology  5
ORNH 100  Introduction to Ornamental Horticulture  3
PHYS 101  General Physics  4
ZOOL 120  Introduction to Animal Science  4

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

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete 60 units to include: (1) The above required courses, (2) electives as needed, and (3) the Associate in Arts Degree General Education requirements.

CAREER OPPORTUNITIES: Programs with an emphasis in Agriculture are designed for agriculturally-related occupations in business, industry, specialized services, education, conservation, recreation and production. Many careers unknown a few years ago have expanded with mechanization to meet food needs.
See Cerritos College Graduation Requirements.
See State University General Education List.

ANTHROPOLOGY—710
TRANSFER PROGRAM
COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY  UNITS
ANTH 100  Cultural Anthropology  3
ANTH 115  Human Evolution and Variation  3
ANTH 120  Introduction to Archeology  3

ADDITIONAL LOWER DIVISION RECOMMENDED COURSES FOR SPECIFIC TRANSFER INSTITUTIONS

LOWER DIVISION RECOMMENDED COURSES FOR SPECIFIC TRANSFER INSTITUTIONS
California State University - Los Angeles:
A modern foreign language (101 and 102 level), or successful completion of 3 years of high school foreign language, or a designated upper-division course in linguistics is required.

California State University - Los Angeles:
ANTH 200—Native Peoples of North America—3 Or ANTH 201—Native Peoples of California—3 Or ANTH 202—The Maya, Inca and Aztecs: Ancient Civilizations of the Americas—3
UCLA also offers a B.S. in Anthropology. See a counselor for requirements.

California State University - Riverside:
ENGL 106—Introduction to Language Study—3
UCR offers a B.A. and B.S. in Anthropology. A B.A. in Anthropology/Law and Society is also available; see a counselor for additional requirements.

CAREER OPPORTUNITIES: Employment for the person holding the Ph.D. in Anthropology is good. Usual placements are chiefly in colleges and universities and also in museums, national parks, and in technical aid programs. Persons holding the B.A. will find limited employment. A person interested in teaching can use Anthropology as a teaching minor.

California State University - Dominguez Hills:
CSUDH offers a Clinical Anthropology concentration which provides majors with a background in medical and psychological anthropology, useful for careers in health and health-related fields.
The Master of Arts program in Anthropology generally provides training in one or more of the following fields of study: 1) Cultural Anthropology, 2) Ethnography, 3) Archaeology, 4) Linguistics, 5) Physical Anthropology, 6) Social Organization.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete the above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all A.A. degree general education requirements for a total of least 60 units.

See Cerritos College Graduation Requirements.
See State University General Education List.
### Architectural Technology—825

#### Associate in Arts Degree Program

**Required Courses**

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<td>ARCH 111 Architectural Drafting</td>
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<tr>
<td>ARCH 112 History of Architecture</td>
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<td>ARCH 113 Building Codes</td>
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<td>ARCH 121 Materials and Methods of Building Construction</td>
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<td>ARCH 122 Architectural Delineation</td>
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<td>ARCH 123 Introduction to Computer Aided Drafting for Architecture</td>
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<td>ARCH 211 Architectural Design, Programming &amp; Presentation</td>
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<tr>
<td>ARCH 212 Architectural Design Theory I</td>
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<td>ARCH 213 Advanced Applications of Computer Aided Drafting for Architecture</td>
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<td>ARCH 221 Working Drawing/Architectural Desktop</td>
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<td>ARCH 222 Architectural Design Theory II</td>
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#### Associate in Arts Degree Requirements:

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

**Recommended Electives:** PSYC 101, BA 100, BUSR 101.

**Career Opportunities:** Employment as an architectural draftsman, Architectural CAD drafter. Related Transfer Programs: See Architecture—605 and Industrial Technology-Construction—837.

See Cerritos College Graduation Requirements.

### Architecture—605

#### Transfer Program

**Common Lower Division Requirements**

<table>
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<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 110 Introduction to Architecture and Environmental Design</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 111 Architectural Drafting</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 112 History of Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 121 Materials and Methods of Building Construction</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 122 Architectural Delineation</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 211 Architectural Design, Programming and Presentation</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 212 Architectural Design Theory I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 222 Architectural Design Theory II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201 Principles</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102 Freshman Composition and Literature</td>
<td>3</td>
</tr>
<tr>
<td>MATH 140 Trigonometry</td>
<td>3</td>
</tr>
</tbody>
</table>

**Additional Lower Division Requirements for Specific Transfer Institutions**

- **California State Polytechnic University - Pomona**
  - PHYS 101 General Physics and Laboratory | 4 |

- **California State Polytechnic University - San Luis Obispo**
  - MATH 170 Analytic Geometry and Calculus I | 4 |
  - MATH 190 Analytic Geometry and Calculus II | 4 |
  - PHYS 201 Engineering Physics | 4 |
  - PHYS 203 Engineering Physics | 4 |

**University of California - Berkeley**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 110 Freehand Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 121 Three-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>MATH 102 Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 103 Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 201 Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

**Note:** The undergraduate programs in architecture are impacted programs. Besides meeting entrance requirements to the universities, prospective students are required to also, make separate application to the School of Architecture. Applicants are evaluated through a selection process carried out by departmental faculty. See your counselor for specific recommendations for this major.

**Associates 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 in general education requirements.

**Career Opportunities:** Bachelor Degree graduates will have developed design and related skills necessary for entry into the professional field of Architecture.

See Cerritos College Graduation Requirements.

### Art and Design—111

#### Associate in Arts Degree

**Required Courses** (15 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 102 Appreciation and History</td>
<td>3</td>
</tr>
<tr>
<td>or ART 103 Modern and Contemporary Appreciation (3)</td>
<td></td>
</tr>
<tr>
<td>ART 110 Freehand Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 112 Life Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 120 Two-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 121 Three-Dimensional Design</td>
<td>3</td>
</tr>
</tbody>
</table>

**Art Optional Tracks** (Choose One)

**Art History** Required (12 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 100 World Art History</td>
<td>3</td>
</tr>
<tr>
<td>ART 101 Appreciation and History</td>
<td>3</td>
</tr>
<tr>
<td>ART 102 Appreciation and History</td>
<td>3</td>
</tr>
<tr>
<td>or ART 103 Modern and Contemporary Appreciation</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 106 Mexican Art</td>
<td>3</td>
</tr>
</tbody>
</table>

**Ceramics** Required (6 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ART 150 Beginning Ceramics I</td>
<td>3</td>
</tr>
<tr>
<td>ART 151 Beginning Ceramics II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Jewelry** Required (12 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ART 144 Jewelry</td>
<td>3</td>
</tr>
<tr>
<td>ART 145 Lost Wax Casting/Rubber Mold Making</td>
<td>3</td>
</tr>
<tr>
<td>ART 246 Jewelry Design Fabrication</td>
<td>3</td>
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</table>

**Drawing and Painting**—(9 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 130A Fundamentals of Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 130B Fundamentals of Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 136 Beginning Painting for Art Majors</td>
<td>3</td>
</tr>
</tbody>
</table>
## PRINTMAKING— (9 units)
- ART 116 Beginning Printmaking 3
- ART 117 Intermediate Printmaking 3
- ART 218 Screenprinting 3
- or ART 219 Advanced Etching (3)

## SCULPTURE— (11 units)
- ART 160 Life Modeling 2
- ART 162 Sculpture I 3
- ART 163 Sculpture II 3
- ART 264 Sculpture III 3

### DESIGN OPTIONAL TRACKS (CHOOSE ONE)

#### GRAPHIC DESIGN--Required (18 units)
- ART 182A Lettering and Typography 3
- ART 184 Graphic Design I 3
- ART 186 Computer Graphics in Art and Design (Digital Drawing) 3
- ART 188 Desktop Publishing Design 3
- ART 192 Digital Imaging 3
- ART 284 Graphic Design II 3

#### MULTIMEDIA DESIGN--Required (18 units)
- ART 186 Computer Graphics in Art and Design (Digital Drawing) 3
- ART 188 Desktop Publishing Design 3
- ART 192 Digital Imaging 3
- ART 194 Multimedia Design 3
- ART 195 Computer Modeling 3
- ART 196 Introduction to Designing Web Graphics 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
- CIS 205 Programming in HTML or the World Wide Web 1.5

### PRINTMAKING
- ART 218 Screenprinting 3
- ART 219 Advanced Etching 3

### ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

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

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

See Cerritos College Graduation Requirements.

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## ART AND DESIGN— 116

### TRANSFER PROGRAM

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

<table>
<thead>
<tr>
<th>ART AND DESIGN</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>3</td>
</tr>
<tr>
<td>ART 102</td>
<td>3</td>
</tr>
<tr>
<td>ART 110</td>
<td>3</td>
</tr>
<tr>
<td>ART 120</td>
<td>3</td>
</tr>
<tr>
<td>ART 121</td>
<td>3</td>
</tr>
</tbody>
</table>

#### GRAPHIC DESIGN (in addition to the above)
- ART 182A Lettering and Typography I 3

#### MULTIMEDIA DESIGN (in addition to the above)
- ART 182A Lettering and Typography I 3
- ART 185 Rendering 3

#### ADDITIONAL LOWER DIVISION REQUIREMENTS FOR SPECIFIC CALIFORNIA STATE UNIVERSITIES

**California State University - Dominguez Hills**
- ART 103 Modern and Contemporary Appreciation 3
- ART 130A Fundamentals of Painting 3
- ART 162 Sculpture I 3

**California State University - Fullerton**
- ART 112 Life Drawing 3
- ART 130A Fundamentals of Painting 3
- ART 130B Fundamentals of Painting 3

**California State University - Long Beach**
- ART 136 Beginning painting for Art Majors 3

**California State University - Los Angeles**
- ART 112 Life Drawing 3
- ART 130A Fundamentals of Painting 3
- or ART 136 Beginning Painting for Arts Major 3
Curricula, Requirements for Majors, Certificates and Transfer Programs

Available Options: Animation (Traditional and Computer Track); Design; Art Education; Art History; Fashion and Textiles.

LOWER DIVISION REQUIREMENTS FOR SPECIFIC CAMPUSES OF THE UNIVERSITY OF CALIFORNIA

University of California - Irvine
ART 101 Appreciation and History 3
ART 102 Appreciation and History 3
ART 103 Modern and Contemporary Appreciation 3

Plus, four (4) courses selected from,
ART 110 Freehand Drawing 3
ART 130A Fundamentals of Painting 3
ART 162 Sculpture I 3
ART 155 Beginning Ceramic Sculpture 3
or ART 192 Digital Imaging 3

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

Plus, one (1) course selected from:
ART 101 Appreciation and History 3
or ART 102 Appreciation and History 3
or ART 105 Women Artists 3
or ART 100 Introduction to World Art 3
or ART 107 Asian Art History 3

University of California - Riverside
ART 110 Freehand Drawing 3
ART 136 Beginning Painting for Art Majors 3

Plus, one (1) course selected from:
ART 101 Appreciation and History 3
or ART 102 Appreciation and History 3
or ART 103 Modern and Contemporary Appreciation 3

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

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for the Certificate of Achievement in Autobody Management. Plus, for an A.A. Degree a student should also complete BA 100, BA 53, BA 121, BCOM 147, and TM 50, electives and general education requirements to achieve a minimum of 60 units.

CAREER OPPORTUNITIES: This program prepares the student with entry skills in the automotive collision repair and refinishing trade, including: shop manager, shop supervisor, estimator, production manager, insurance adjuster.

See Cerritos College Graduation Requirements.

AUTOBODY MANAGEMENT— 852
CERTIFICATE OF ACHIEVEMENT

REQUIRED COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB 51</td>
<td>Non-Structural Damage Repair</td>
<td>4.5</td>
</tr>
<tr>
<td>or AB 50A</td>
<td>Body Trim &amp; Minor Repairs</td>
<td>(1)</td>
</tr>
<tr>
<td>or AB 50B</td>
<td>Panel Replacement</td>
<td>(1)</td>
</tr>
<tr>
<td>or AB 50C</td>
<td>Structural Repair Setup</td>
<td>(1)</td>
</tr>
<tr>
<td>AB 56</td>
<td>Non-Structural Automotive Welding</td>
<td>2</td>
</tr>
<tr>
<td>AB 61</td>
<td>Preparation &amp; Spot Refinishing</td>
<td>4.5</td>
</tr>
<tr>
<td>or AB 60A</td>
<td>Sanding &amp; Paint Prep</td>
<td>(1)</td>
</tr>
<tr>
<td>AB 60B</td>
<td>Mix &amp; Apply Paint</td>
<td>(1)</td>
</tr>
<tr>
<td>and AB 60C</td>
<td>Paint Defects-Causes &amp; Cures</td>
<td>(1)</td>
</tr>
<tr>
<td>AB 80</td>
<td>Autobody Customer Service</td>
<td>2</td>
</tr>
<tr>
<td>AB 86</td>
<td>Production Management</td>
<td>2</td>
</tr>
<tr>
<td>AB 88</td>
<td>Estimating and Management Update</td>
<td>3</td>
</tr>
<tr>
<td>AB 181</td>
<td>Non-Structural Damage Estimating</td>
<td>3</td>
</tr>
<tr>
<td>or AB 80A</td>
<td>Vehicle Staging</td>
<td>(1)</td>
</tr>
<tr>
<td>AB 80B</td>
<td>Damage Analysis &amp; Auto Systems</td>
<td>(1)</td>
</tr>
<tr>
<td>and AB 80C</td>
<td>Vehicle Types &amp; Auto Systems</td>
<td>(1)</td>
</tr>
<tr>
<td>AB 182</td>
<td>Structural Damage Estimating</td>
<td>3</td>
</tr>
<tr>
<td>AB 183</td>
<td>Computerized Damage Estimating</td>
<td>4.5</td>
</tr>
<tr>
<td>AB 285</td>
<td>Collision Repair Management</td>
<td>3</td>
</tr>
<tr>
<td>AB 287</td>
<td>Advanced Collision Repair Management</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENT 33.5(30.5)

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for the Certificate of Achievement in Autobody Management. Plus, for an A.A. Degree a student should also complete BA 100, BA 53, BA 121, BCOM 147, and TM 50, electives and general education requirements to achieve a minimum of 60 units.

CAREER OPPORTUNITIES: This program prepares the student with entry skills in the automotive collision repair and refinishing trade, including: shop manager, shop supervisor, estimator, production manager, insurance adjuster.

See Cerritos College Graduation Requirements.

AUTOBODY REFINISHING— 814
CERTIFICATE OF ACHIEVEMENT

REQUIRED COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB 51</td>
<td>Non-Structural Damage Repair</td>
<td>4.5</td>
</tr>
<tr>
<td>or AB 50A</td>
<td>Body Trim &amp; Minor Repairs</td>
<td>(1)</td>
</tr>
<tr>
<td>or AB 50B</td>
<td>Panel Replacement</td>
<td>(1)</td>
</tr>
<tr>
<td>or AB 50C</td>
<td>Structural Repair Setup</td>
<td>(1)</td>
</tr>
<tr>
<td>AB 56</td>
<td>Non-Structural Automotive Welding</td>
<td>2</td>
</tr>
<tr>
<td>AB 61</td>
<td>Preparation &amp; Spot Refinishing</td>
<td>4.5</td>
</tr>
<tr>
<td>or AB 60A</td>
<td>Sanding &amp; Paint Prep</td>
<td>(1)</td>
</tr>
<tr>
<td>AB 60B</td>
<td>Mix &amp; Apply Paint</td>
<td>(1)</td>
</tr>
<tr>
<td>or AB 60C</td>
<td>Paint Defects-Causes &amp; Cures</td>
<td>(1)</td>
</tr>
<tr>
<td>AB 62</td>
<td>Overall &amp; Multi-Coat Refinishing</td>
<td>4.5</td>
</tr>
<tr>
<td>AB 63</td>
<td>Production Refinishing</td>
<td>4.5</td>
</tr>
<tr>
<td>AB 65</td>
<td>Mixing and Adjusting Color</td>
<td>3</td>
</tr>
<tr>
<td>AB 66</td>
<td>Lettering, Striping, and Design</td>
<td>2</td>
</tr>
<tr>
<td>AB 86</td>
<td>Production Management</td>
<td>2</td>
</tr>
<tr>
<td>AB 181</td>
<td>Non-Structural Damage Estimating</td>
<td>3</td>
</tr>
<tr>
<td>or AB 80A</td>
<td>Vehicle Staging</td>
<td>(1)</td>
</tr>
<tr>
<td>AB 80B</td>
<td>Damage Analysis &amp; Auto Systems</td>
<td>(1)</td>
</tr>
<tr>
<td>AB 80C</td>
<td>Vehicle Types &amp; Auto Systems</td>
<td>(1)</td>
</tr>
</tbody>
</table>
AB 285  Collision Repair Management  3

TOTAL CERTIFICATE REQUIREMENT  33(30)

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for the Certificate of Achievement in Autobody Refinishing, Plus, for an A.A. Degree a student should also complete BA 100, BA 53, BA 121, BCOM 147, and TM 50, electives and general education requirements to achieve a minimum of 60 units.

CAREER OPPORTUNITIES: This program prepares the student with entry skills in the automotive collision repair and refinishing trade, including: body repair technician assistant, painter, painter’s assistant, shop supervisor, estimator, production manager, insurance adjuster/estimator.

See Cerritos College Graduation Requirements.

AUTOMOTIVE COLLISION REPAIR
(AUTOBODY TECHNICIAN)— 849

CERTIFICATE OF ACHIEVEMENT

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

TOTAL CERTIFICATE REQUIREMENT:  36(30)

Employment opportunities upon completion of the program: Technician in Automotive Collision Repair and Refinishing.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for the Certificate of Achievement in Automotive Collision Repair. Plus, for an A.A. Degree complete such electives and general education requirements including TM 1.2 to achieve a minimum of 60 units.

AB 51, AB 56 and AB 57 may be substituted for I-CAR Welding Qualification Test Certification plus 9 units of AB 73 Work Experience.
AB 50A, AB 50B, and AB 50C may be substituted for AB 51, AB 60A, AB 60B, and AB 60C may be substituted for AB 56, AB 80A, AB 80B, and AB 80C may be substituted for AB 181.

CAREER OPPORTUNITIES: This program prepares the student with entry skills in the automotive collision repair and refinishing trade, including: body repair technician, body repair technician assistant, painter, painter’s assistant, shop supervisor, estimator, production manager, insurance adjuster/estimator.

See Cerritos College Graduation Requirements.

AUTOMOTIVE MECHANICAL REPAIR TECHNOLOGY— 810
CERTIFICATES OF ACHIEVEMENT

AUTOMOTIVE MECHANICAL REPAIR TECHNOLOGY-GENERAL TECHNICIAN— 807

<table>
<thead>
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<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 100</td>
<td>Maintenance 4</td>
</tr>
<tr>
<td>AUTO 120</td>
<td>Brake &amp; Alignment 5</td>
</tr>
<tr>
<td>AUTO 130</td>
<td>Electrical 4</td>
</tr>
<tr>
<td>AUTO 140</td>
<td>Engines 5</td>
</tr>
<tr>
<td>AUTO 160</td>
<td>Drive Tran 4</td>
</tr>
<tr>
<td>AUTO 223</td>
<td>Body Electrical 4</td>
</tr>
<tr>
<td>AUTO 226</td>
<td>Automatic Transmission 5</td>
</tr>
</tbody>
</table>

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AUTOMOTIVE MECHANICAL REPAIR TECHNOLOGY-ELECTRICAL/DIAGNOSIS TECHNICIAN— 804

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 100</td>
<td>Maintenance 4</td>
</tr>
<tr>
<td>AUTO 130</td>
<td>Electrical 5</td>
</tr>
<tr>
<td>AUTO 140</td>
<td>Engines 5</td>
</tr>
<tr>
<td>AUTO 170</td>
<td>Emission Control 5</td>
</tr>
<tr>
<td>AUTO 180</td>
<td>Air Conditioning 4</td>
</tr>
<tr>
<td>AUTO 223</td>
<td>Body Electrical 4</td>
</tr>
<tr>
<td>AUTO 233</td>
<td>Fuel Systems 5</td>
</tr>
<tr>
<td>AUTO 243</td>
<td>Diagnostic Engine Performance 4</td>
</tr>
</tbody>
</table>

36

AUTOMOTIVE MECHANICAL REPAIR ENGINE/ MACHINING TECHNOLOGY— 805

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 100</td>
<td>Maintenance 4</td>
</tr>
<tr>
<td>AUTO 140</td>
<td>Engines 5</td>
</tr>
<tr>
<td>AUTO 224</td>
<td>Advanced Engines 5</td>
</tr>
<tr>
<td>AUTO 150</td>
<td>Machine Shop I 5</td>
</tr>
<tr>
<td>AUTO 225</td>
<td>Machine Shop II 5</td>
</tr>
<tr>
<td>AUTO 245L</td>
<td>Automotive Specialty 2</td>
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AUTOMOTIVE MECHANICAL REPAIR TECHNOLOGY- MANUFACTURE SPECIALTY— 806

<table>
<thead>
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<th>Units</th>
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<tbody>
<tr>
<td>AUTO 51</td>
<td>Air Conditioning 4</td>
</tr>
<tr>
<td>AUTO 73</td>
<td>Work Experience 15</td>
</tr>
<tr>
<td>AUTO 121</td>
<td>Brake &amp; Alignment 6</td>
</tr>
<tr>
<td>AUTO 131</td>
<td>Electrical 7</td>
</tr>
<tr>
<td>AUTO 141</td>
<td>Engines 4</td>
</tr>
<tr>
<td>AUTO 161</td>
<td>Power Train 6</td>
</tr>
<tr>
<td>AUTO 231</td>
<td>Diagnostic Engine Performance 6</td>
</tr>
</tbody>
</table>

48
AUTOMOTIVE MECHANICAL REPAIR
ELECTRIC VEHICLE (EV) TECHNOLOGY—808

Recommended High School Preparation:
Algebra, Automotive Repair, Electronics

BASIC CORE COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 100</td>
<td>Automotive Maintenance and Operation</td>
<td>4</td>
</tr>
<tr>
<td>AB 51</td>
<td>Collision Repair I</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 54</td>
<td>Introduction to Electric Vehicles</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 55</td>
<td>Advanced Technology Electric Vehicles</td>
<td>4</td>
</tr>
<tr>
<td>EL 86</td>
<td>Electric Motor Control</td>
<td>3</td>
</tr>
<tr>
<td>EL 100</td>
<td>Basic Electronics</td>
<td>4</td>
</tr>
<tr>
<td>TM 50</td>
<td>Technical Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>WELD 100</td>
<td>Welding Fundamentals</td>
<td>2</td>
</tr>
</tbody>
</table>

And six (6) units selected from the following courses:
- AB 57 Advanced Automotive Welding
- AUTO 130 Automotive Electricity
- EL 110 Principles of DC Electronics
- EL 110L Principles of DC Electronics Laboratory
- EL 120 Principles of AC Electronics
- EL 120L Principles of AC Electronics Laboratory
- PMT 100 Plastics Technology I
- PMT 61 Fiberglass I
- WELD 110 Oxyacetylene Welding

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

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

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

See Cerritos College Graduation Requirements.

BILINGUAL EDUCATION—509
TRANSFER PROGRAM

Curriculum leading to A Bachelor of Arts Degree either in a single subject or liberal studies major at The California State University. The State of California provides for a two-step, five-year program leading to the Basic Teaching Credential. The first two years of this process may be completed at Cerritos College.

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 106</td>
<td>Introduction to Language Study</td>
<td>3</td>
</tr>
<tr>
<td>*SPAN 112</td>
<td>Elementary Spanish for Spanish Speakers</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 201</td>
<td>Intermediate Spanish</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 213</td>
<td>Living Spanish Grammar</td>
<td>2</td>
</tr>
<tr>
<td>SPAN 214</td>
<td>Living Spanish Grammar</td>
<td>2</td>
</tr>
<tr>
<td>SPAN 245</td>
<td>Introduction to Chicano Studies</td>
<td>3</td>
</tr>
<tr>
<td>CD 110</td>
<td>Child Development and Guidance</td>
<td>3</td>
</tr>
</tbody>
</table>

*Spanish Speakers may waive SPAN 111 or 112 by examination.

LOWER DIVISION MAJOR REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS
Consult your counselor for current information regarding lower division major requirements for specific transfer institutions. Transfer college catalogs are available in the Counseling Center.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
The completion of 60 units, including the above required courses and the Associate in Arts General Education Requirements, qualifies a student for the Associate in Arts Degree in Bilingual Education.

CAREER OPPORTUNITIES: Professional opportunities after transfer and completion of a university program leading to the basic teaching credential with Bilingual emphasis: Employment as a certified teacher to instruct in any grade level pre-school through classes for adults.

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

BIOLOGY—680
TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY

<table>
<thead>
<tr>
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<th>DESCRIPTION</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>
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<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>5</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>
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</table>

ADDITIONAL LOWER DIVISION REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Dominguez Hills

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 116</td>
<td>Calculus for Managerial, Biological, and Social</td>
<td></td>
</tr>
<tr>
<td>Sciences (4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</td>
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As option to PHYS 101 & 102:

<table>
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<tbody>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
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<tr>
<td>and PHYS 202</td>
<td>Engineering Physics</td>
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California State University - Fullerton

<table>
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<tr>
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<tr>
<td>Bot 120</td>
<td>Introduction to Planet Science</td>
<td>4</td>
</tr>
<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 116</td>
<td>Calculus for Managerial, Biological, and Social</td>
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<tr>
<td>Sciences (4)</td>
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<tr>
<td>ZOOL 120</td>
<td>Introduction to Animal Biology</td>
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California State University - Long Beach

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<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 116</td>
<td>Calculus for Managerial, Biological, and Social</td>
<td></td>
</tr>
<tr>
<td>Sciences (4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
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As option to PHYS 101 and 102:

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</thead>
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<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>and PHYS 202</td>
<td>Engineering Physics</td>
<td></td>
</tr>
</tbody>
</table>
**Curricula, Requirements for Majors, Certificates and Transfer Programs**

**California State University - Los Angeles**

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

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

- BIOL 200 Principles of Biology 5
- BIOL 201 Principles of Biology 5
- CHEM 111 General Chemistry 5
- CHEM 112 General Chemistry 5
- CHEM 211 Organic Chemistry 5
- CHEM 212 Organic Chemistry 5
- PHYS 201 Engineering Physics 4
- PHYS 202 Engineering Physics 4
- PHYS 203 Engineering Physics 4

**ADDITIONAL LOWER DIVISION PREPARATION FOR THE UNIVERSITY OF CALIFORNIA**

- California State University - Irvine
  - BIOL 202 Molecular Biology/Genetics 4
  - MATH 170 Analytic Geometry and Calculus I 4
  - And MATH 190 Analytic Geometry and Calculus II 4
  - OR MATH 170 Analytic Geometry and Calculus I (4)
  - And MATH 112 Elementary Statistics 4
  - OR PSYC 210 Elementary Statistics 4

- University of California - Los Angeles
  - MATH 170 Analytic Geometry and Calculus I 4
  - MATH 190 Analytic Geometry and Calculus II 4
  - MATH 112 Elementary Statistics 4

- University of California - Riverside
  - MATH 170 Analytic Geometry and Calculus I 4
  - MATH 190 Analytic Geometry and Calculus II 4

Students intending to meet lower division requirements for any School or division of the University of California should consult the catalog of that institution. Biology 200 and 201 are especially recommended for the University of California (all campuses). Physics with Calculus as a prerequisite may be required.

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

Complete the 60 units to include (1) the above required courses (2) electives as needed and (3) the Associate in Arts general education degree requirements.

**CAREER OPPORTUNITIES:** The Bachelor's Degree programs with an emphasis in Botany are designed to qualify the student for graduate study in the field; for teaching through the high school level; for applied work with Federal, State park, forestry and agricultural services, and with private industry.

**BOTANY - 685**

**TRANSFER PROGRAM**

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

- California State Polytechnic University, Pomona
  - MATH 116 Calculus for Managerial, Biological, and Social Sciences 4
  - BIOL 200 Principles of Biology 5
  - AND BIOL 201 Principles of Biology 5
  - BOT 120 Introduction to Plant Science 4
  - MICRO 200 Introduction to Microbiology and Bacteriology 5

- University of California, Riverside
  - BIOL 201 Principles of Biology 5
  - BIOL 200 Principles of Biology 5
  - BOT 120 Introduction to Plant Science 4
  - ZOOL 120 Introduction to Animal Science 4
  - MATH 102 Analytic Geometry and Calculus I 4
  - MATH 103 Analytic Geometry and Calculus II 4
  - PHYS 201 Engineering Physics 4
  - PHYS 202 Engineering Physics 4
  - CHEM 111 General Chemistry 5
  - CHEM 112 General Chemistry 5
  - CHEM 211 Organic Chemistry 5
  - CHEM 212 Organic Chemistry 5

**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 requirements.

**CAREER OPPORTUNITIES:** Bachelor's Degree programs with an emphasis in Botany are designed to qualify the student for graduate study in the field; for teaching through the high school level; for applied work with Federal, State park, forestry and agricultural services, and with private industry. See Cerritos College Graduation Requirements. See State University General Education List.

**BUSINESS ACCOUNTING PROGRAMS**

**BUSINESS ACCOUNTING - 240**

**CERTIFICATE OF ACHIEVEMENT**

**DIVISION/DEPARTMENT REQUIREMENTS:**

- *BUSA 101 Fundamentals of Accounting I* 4
- BUSA 102 Fundamentals of Accounting II 4
- BUSA 131 Computerized Accounting-IBM 3
- BUSA 133 Computerized Spreadsheet Accounting 3
- BUSA 201 Intermediate Accounting I 4
- BUSA 202 Intermediate Accounting II 4
- BUSA 240 Cost Accounting 4
- BUSA 241 Managerial Accounting (4)
- BUSA 250 Income Tax Accounting 3
- OR BUSA 130 Payroll Tax Accounting (3)
- BUSF 50 Electronic Calculators/Business Applications 3
- BUSF 125 Personal Finance 3
- OR BUSA 60 QuickBooks Accounting (1.5)
- AND BUSA 61 Turbo Tax Accounting (1.5)

**TOTAL CERTIFICATE REQUIREMENTS: 35**

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

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

OTHER RECOMMENDED COURSES:
BA 100  Fundamentals of Business  3
BA 111  Business Law  3
BCOM 147  Business Communications  3

*Bprerequisite for BUSA 101 - BUSA 100.

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

BUSINESS ACCOUNTING
ADVANCED ACCOUNTING— 244
CERTIFICATE OF ACHIEVEMENT
DIVISION/DEPARTMENT REQUIREMENTS:  UNITS
Complete the Accounting Certificate-240 Requirements:  35
Plus any three of the following four courses:
BUSA 240  Cost Accounting  4
BUSA 241  Managerial Accounting  4
BUSA 270  Fundamentals of Auditing  3
BUSA 280  Advanced Accounting  3
TOTAL CERTIFICATE REQUIREMENTS:  45/46

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

OTHER RECOMMENDED COURSE:
BA 112  Business Law

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

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

BUSINESS ACCOUNTING
MICROCOMPUTER ACCOUNTING CLERK— 243
CERTIFICATE OF ACHIEVEMENT
DIVISION/DEPARTMENT REQUIREMENTS:  UNITS
BUSA 100  Introduction to Accounting  3
BUSA 101  Fundamentals of Accounting I  4
BUSA 131  Computerized Accounting-IBM  3
BUSA 133  Computerized Spreadsheet Accounting  3
BUSH 50  Electronic Calculators/Business Applications  3
BUSH 125  Personal Finance  3
or BUSA 60  QuickBooks Accounting (1.5)
and BUSA 61  Turbo TaxAccounting (1.5)
CIS 102  Introduction to Microcomputer Systems  3
TOTAL CERTIFICATE REQUIREMENTS:  22

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:
*BUSA 130  Payroll TaxAccounting  3
BA 111  Business Law  3
BASS 108  WordPerfect for Windows  3.5
or BASS 112  Word for Windows (3.5)
BCOM 147  Business Communications  3

*Required for Advanced Microcomputer Accounting Clerk Certificate— 245

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

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

ADVANCED MICROCOMPUTER ACCOUNTING CLERK— 245
CERTIFICATE OF ACHIEVEMENT
DIVISION/DEPARTMENT REQUIREMENTS:  UNITS
Complete Microcomputer Accounting Clerk-243 CERTIFICATE REQUIREMENTS:22 units
Plus any three of the following courses:
BUSA 130  Payroll TaxAccounting  3
BUSA 250  Income TaxAccounting  3
BA 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
BA 111  Business Law  3
BCOT 108  WordPerfect for Windows  3.5
or BCOT 112  Word for Windows (3.5)

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

Please see a Business Counselor or the respective department for additional alternatives.
BUSINESS ACCOUNTING—PAYROLL ADMINISTRATION—289

CERTIFICATE OF ACHIEVEMENT
(PENDING CHANCELLOR’S OFFICE APPROVAL)

DIVISION/DEPARTMENT REQUIREMENTS: UNITS

BUSA 60 Quickbooks Accounting 1.5
BUSA 100 Introduction to Accounting 3
BUSA 130 Payroll Tax Accounting 3
BUSA 133 Computerized Spreadsheet Accounting 3
BUSA 230 Advanced Payroll Accounting 3
BUSA 231 Current Topics in Payroll 1.5
BL 105 Introduction to Federal & California Employment, Labor, & Workers’ Compensation Law 3
BA 106 Human Resource Development 3

TOTAL CERTIFICATE REQUIREMENTS: 21

OTHER RECOMMENDED COURSES:

BUSA 101 Fundamentals of Accounting I 4
BUSA 131 Computerized Accounting-IBM 3
BUSA 160 Income Tax Accounting 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 & Applications Software 3

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.

NOTE: Although many of these courses are transferable, this certificate/A.A. degree is nontransferable.
Please see a Business counselor or the respective department for additional alternatives.

BUSINESS ADMINISTRATION PROGRAMS

BUSINESS ADMINISTRATION MINOR
CERTIFICATE OF COMPLETION (9 UNITS)

Complete, with a grade of "C" or better, BA 100 and two additional Business Administration courses which have been determined in consultation with a full-time business instructor, or counselor, to enhance the student’s individual employment success.

Upon receiving your Certificate of Achievement or A.A. degree, a statement will be placed on your official transcript that you have completed the requirements for a Minor in Business Administration.

A separate certification of completion of the requirements for a Minor in Business Administration can also be issued. Check with department for details.

CAREER OPPORTUNITIES: This minor combined with your major provides significant preparation for employment in business, private industry, and self-employment.

BUSINESS ADMINISTRATION—273

CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS: UNITS

BUSA 101 Fundamentals of Accounting I 4
BUSA 102 Fundamentals of Accounting II 4
BA 111 Business Law 3
BA 112 Business Law 3
BA 114 Marketing 3
BA 115 Management Business 3
BA 171-174 Business Administration Occupational Work Experience 1-4
CIS 101 Introduction to Computer Information Systems 3
ECON 201 Principles 3
ECON 202 Principles 3
OR BA 113 Legal Environment (3)

TOTAL CERTIFICATE REQUIREMENTS: 30/33

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Business Administration. Complete electives BA 101 and CIS 102 and complete general education requirements to achieve a minimum of 60 units. (Highly recommend completion of BCOM 147.)

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

See Cerritos College Graduation Requirements.

BUSINESS ADMINISTRATION—773

TRANSFER PROGRAM

LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS UNITS

California State University - Dominguez Hills
BA 111 Business Law 3
BUSA 100 Introduction to Accounting 3
### Curricula, Requirements for Majors, Certificates and Transfer Programs

<table>
<thead>
<tr>
<th>Degree</th>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td><strong>California State University - Fullerton</strong></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>BA 113</td>
<td>Legal Environment of Business</td>
<td>3</td>
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<tr>
<td></td>
<td>BUSA 100</td>
<td>Introduction to Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BUSA 101</td>
<td>Fundamentals of Accounting I</td>
<td>4</td>
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<td></td>
<td>BUSA 102</td>
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<td>BUSA 133</td>
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<td>CIS 101</td>
<td>Introduction to Computer Information Systems</td>
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<tr>
<td></td>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
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<td>MATH 116</td>
<td>Calculus for Managerial, Biological, and Social Sciences</td>
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<td>ENGL 100</td>
<td>Freshman Composition</td>
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<td>ENGL 102</td>
<td>Freshman Composition and Literature</td>
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<tr>
<td></td>
<td>OR ENGL 103</td>
<td>Critical and Argumentative Writing</td>
<td>(3)</td>
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<tr>
<td></td>
<td>OR PHIL 202</td>
<td>Critical Thinking and Argumentative Writing</td>
<td>(3)</td>
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<td><strong>California State University - Long Beach</strong></td>
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<td>ECON 202</td>
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<td>MATH 112</td>
<td>Elementary Statistics</td>
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<td>4</td>
</tr>
<tr>
<td></td>
<td>CIS 101</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td><strong>University of California - Riverside</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>BA 100</td>
<td>Fundamentals of Business</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BUSA 100</td>
<td>Introduction to Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BUSA 101</td>
<td>Fundamentals of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>BUSA 102</td>
<td>Fundamentals of Accounting II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CIS 101</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 170</td>
<td>Analytical Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>OR ENGL 103</td>
<td>Critical and Argumentative Writing</td>
<td>(3)</td>
</tr>
<tr>
<td></td>
<td>OR PHIL 202</td>
<td>Critical Thinking and Argumentative Writing</td>
<td>(3)</td>
</tr>
</tbody>
</table>

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

Complete the Following Common Lower Division Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 111, BUSA 100, BUSA 101, or 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.</td>
<td></td>
</tr>
</tbody>
</table>

**CAREER OPPORTUNITIES:** Career opportunities are numerous and depend on the specialization selected, ranging from independent practice as a Certified Public Accountant to corporate leadership in a multinational company.

See Cerritos College Graduation Requirements.

See State University General Education List

**BUSINESS MANAGEMENT—215 CERTIFICATE OF ACHIEVEMENT**

**DIVISION/DEPARTMENT REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 100</td>
<td>Fundamentals of Business</td>
</tr>
<tr>
<td>BA 101</td>
<td>International Business</td>
</tr>
<tr>
<td>BA 107</td>
<td>Human Relations in Business</td>
</tr>
<tr>
<td>BA 111</td>
<td>Business Law</td>
</tr>
<tr>
<td>BA 115</td>
<td>Management-Business</td>
</tr>
<tr>
<td>OR BA 153</td>
<td>Small Business Management</td>
</tr>
<tr>
<td>BA 117</td>
<td>Introduction to Supervision—3</td>
</tr>
<tr>
<td>BA 171-174</td>
<td>Business Administration Occupational Work Experience</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS:** 19-22
ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Business Management. Select 15 units from the following: BA 50 or CIS 101 or CIS 102, BA 106, BA 112, BA 114, BA 115 and BA 153, BUSA 100 or BUSA 101, and BCOM 147 and complete general education requirements to achieve a minimum of 60 units.

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

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

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

See Cerritos College Graduation Requirements.

BUSINESS MANAGEMENT SPECIALIZATION
An A.A. Degree in Business Management with a specialization may be achieved by taking two courses from one of the following categories:

1. Human Resources
   BA 105 and PSYC 101 OR SOC 101
2. Small Business Ownership
   BA 101 or BA 110, BA 54 and BA 153
3. Legal Management
   BA 113 and BA 51
4. Supermarket Management
   BA 203 and BA 119
5. Banking Management
   BA 200 and BA 201

EMPLOYMENT DEVELOPMENT— 227 CERTIFICATE OF ACHIEVEMENT
DIVISION/DEPARTMENT REQUIREMENTS:
1. COMPLETION OF 9 UNITS IN COURSES SELECTED FROM ONE OF THE DEPARTMENTS LISTED BELOW:
   a. Business Accounting/Finance
   b. Business Administration
   c. Business Computerized Office Technologies/Business Communications
   d. Business Court Reporting
   e. Business Paralegal
   f. Business Real Estate

2. COMPLETION OF 12 UNITS OF OCCUPATIONAL WORK EXPERIENCE COURSES IN THE SAME OCCUPATIONAL DISCIPLINE AS LISTED ABOVE. (REQUIREMENT: CONCURRENT ENROLLMENT IN ONE 4-UNIT WORK EXPERIENCE COURSE AND ONE 3-UNIT COURSE FROM DEPARTMENT SELECTED.)

   (Using the Business Administration Department)
   BA 100 Fundamentals of Business 3
   BA 174 *Business Administration Occupational Work Experience 4
   BA 107 Human Relations in Business 3
   BA 174 *Business Administration Occupational Work Experience 4
   BA 111 Business Law 3
   BA 174 *Business Administration Occupational Work Experience 4

TOTAL CERTIFICATE REQUIREMENTS: 31

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Business Employment Development. Complete BA 101, BA 107, BA 111, BA 112, BA 115 or BA 153, BA 121 or BA 110 or BA 114, and BCOM 147 and complete general education requirements to achieve a minimum of 60 units.

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

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

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

See Cerritos College Graduation Requirements.

MANAGEMENT DEVELOPMENT
MERCHANDISING--228 CERTIFICATE OF ACHIEVEMENT
DIVISION/DEPARTMENT REQUIREMENTS:
BA 50 Business Math 3
BA 54 Retail Display 3
BA 110 Advertising 3
BA 118 Management - Retailing 3
BA 123 Fundamentals of Retailing 3
BA 174 *Business Administration Occupational Work Experience 4
BA 174 *Business Administration Occupational Work Experience 4
BA 174 *Business Administration Occupational Work Experience 4
BA 174 *Business Administration Occupational Work Experience 4

TOTAL CERTIFICATE REQUIREMENTS: 31

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Business Merchandising. Complete nine units of Business Division electives and complete general education requirements to achieve a minimum of 60 units.

Highly recommend completion of BCOM 147.

*This is a program that permits 16 units of credit to be earned on the job. The student must work at least 20 hours per week in a related industry.

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

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

See Cerritos College Graduation Requirements.
BUSINESS MANAGEMENT
SUPERMARKET— 216
BUSINESS MANAGEMENT-
SUPERMARKET DEPARTMENT AWARD - 16/19 UNITS
BA 107  Human Relations in Business  3
BA 114  Marketing                    3
BA 115  Management/Business          3
BA 123  Management/Retailing         3
BA 171-174 Business Administration Occupational Work Experience  1-4
BA 203  Management/Department Operations  3

CERTIFICATE OF ACHIEVEMENT - 31/34 units
In addition to the 16/19 units required for the Department Award, choose additional 15 units from the following for a Certificate of Achievement:
BA 50  Business Math                  3
BA 56  Motivation in Management       3
BA 110  Advertising                   3
BA 111  Business Law                  3
BA 119  Management-Supermarket        3
BA 120  Management- Accounting and Internal Control  3
BUS A 241  Managerial Accounting      4
CIS 101  Introduction to Computer Information Systems  3
CIS 102  Introduction to Microcomputer Hardware & Applications Software  3
BCOM 148  Effective Business Presentations  3
TOTAL CERTIFICATE REQUIREMENTS:  31/34

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Business Management-Supermarket. Complete BA 110 or CIS 102, BA 153, BA 111, BA 112, and BCOM 147 and complete general education requirements to achieve a minimum of 60 units.
NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.
CAREER OPPORTUNITIES: Prepares the student for a variety of career opportunities in business, industry, government, and self-employment.
Please see Business counselors or the respective department for additional alternatives.
See Cerritos College Graduation Requirements.

BUSINESS SUPERVISION— 225
CERTIFICATE OF ACHIEVEMENT
DIVISION/ DEPARTMENT REQUIREMENTS UNITS
BA 107  Human Relations in Business  3
BA 108  Labor Management Relations   3
BA 115  Management-Business          3
BA 117  Introduction to Supervision   3
BA 171/174 Business Administration Occupational Work Experience  1-4
BCOM 147  Business Communications    3
BCOM 148  Effective Business Presentations  3
CIS 101  Introduction to Computer Information Systems  3
TOTAL CERTIFICATE REQUIREMENTS:  22/25

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Business Supervision and complete general education requirements to achieve a minimum of 60 units.
NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.
Please see Business Counselors or the respective department for additional alternatives.

BUSINESS PRODUCTION AND INVENTORY MANAGEMENT— 226

PRODUCTION AND INVENTORY MANAGEMENT DEPARTMENTAL CERTIFICATE - 18 semester units
CERTIFICATE OF ACHIEVEMENT - 28/31 semester units

BUSINESS PRODUCTION AND INVENTORY MANAGEMENT CERTIFICATE - 18 units
DIVISION/ DEPARTMENT REQUIREMENTS UNITS
BA 57  Inventory Management           3
BA 58  Just-In-Time Inventory Mangement 3
BA 59  Material Requirements Planning (MRP) 3
BA 60  Master Scheduling              3
BA 206  Production Activity Control   3
BA 207  Capacity Management           3
CERTIFICATE OF ACHIEVEMENT - 28/31 units

Courses required for Certificate of Achievement in addition to the above:

CIS 101 Introduction to Computer Information Systems 3
BA 100 Fundamentals of Business 3
BA 107 Human Relations in Business 3
BA 171-174 Business Administration Occupational Work Experience 1-4

TOTAL CERTIFICATE REQUIREMENTS: 28/31

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

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

BUSINESS COMPUTERIZED OFFICE TECHNOLOGIES

OFFICE TECHNOLOGIES
CERTIFICATE OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS UNITS
BCOM 46 Business Communications 3
BCOM 50 Internet As a Business Communication Tool 3.5
BCOT 114 Introduction to Microsoft Office 3.5
BCOT 133 Intermediate Typing/Keyboarding 3.5
BCOT 161 Principles of Filing 1
BCOT 162 Business Spelling & Proofreading Skills 3

TOTAL CERTIFICATE REQUIREMENTS: 17.5

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

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

LEGAL SECRETARIAL PROGRAM

LEGAL SECRETARY — 251
CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS UNITS
BCOM 147 Business Communications 3
BCOM 152 Job Search in the Business Field 1.5
BCOT 80 Processing Law Office Documents 2
BCOT 81 Legal Office Procedures-4
BCOT 82 Spanish Legal Office Terminology and Vocabulary 1.5
BCOT 83 Legal Office Terminology/Machine Transcription 4.5
BCOT 108 WordPerfect for Windows 3.5
OR BCOT 112 Microsoft Word For Windows (3.5)
BCOT 133 Intermediate Typing/Keyboarding 3.5
BCOT 135 Typewriting Speed/Control Building 1
BCOT 162 Business Spelling and Proofreading Skills 3
BL 100 Introduction to California Civil Procedures 3

TOTAL CERTIFICATE REQUIREMENTS: 30.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Legal Secretary - 251 and complete general education requirements and electives to achieve a minimum of 60 units.

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

LEGAL TRANSCRIPTIONIST — 250

COMPLETION OF ALL THE REQUIRED COURSES LISTED IN LEGAL SECRETARY-251 AND ONE ADDITIONAL COURSE LISTED BELOW:

Choose 3.5 units from the following:
BCOT 50 Advanced WordPerfect for Windows 3.5
BCOT 51 Advanced Microsoft Word for Windows 3.5

TOTAL CERTIFICATE REQUIREMENTS: 32.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Legal Transcriptionist - 250 and complete general education requirements and electives to achieve a minimum of 60 units.

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

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

LEGAL SECRETARIAL PROGRAM/ BILINGUAL

LEGAL SECRETARY/ BILINGUAL — 259
CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS UNITS
BCOM 147 Business Communications 3
BCOM 152 Job Search in the Business Field 1.5
BCOT 80 Processing Law Office Documents 2
BCOT 81 Legal Office Procedures-4
BCOT 82 Spanish Legal Office Terminology and Vocabulary 1.5
BCOT 83 Legal Office Terminology/Machine Transcription 4.5
BCOT 108 WordPerfect for Windows 3.5
OR BCOT 112 Microsoft Word For Windows (3.5)
BCOT 133 Intermediate Typing/Keyboarding 3.5
BCOT 135 Typewriting Speed/Control Building 1
BCOT 162 Business Spelling and Proofreading Skills 3
BL 100 Introduction to California Civil Procedures 3

TOTAL CERTIFICATE REQUIREMENTS: 30.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Legal Secretary/Bilingual - 259 and complete general education requirements and electives to achieve a minimum of 60 units.
NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.

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

OFFICE PROGRAM
FILE CLERK
CERTIFICATE OF COMPLETION
DIVISION/DEPARTMENT REQUIREMENTS UNITS
BCOM 152 Job Search in the Business Field 1.5
BCOT 131 Beginning Typing/Keyboarding 3.5
OR BCOT 61 Typing/Keyboarding Review (2) 
BCOT 161 Principles of Filing 1
BCOT 162 Business Spelling and Proofreading Skills 3

TOTAL CERTIFICATE REQUIREMENTS: 7.5/9

NOTE: Although many of these courses are transferable, this Certificate of Completion is nontransferable.

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

See Cerritos College Graduation Requirements.

GENERAL OFFICE—253
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 60 Telephone Techniques/Customer Service 1
BCOT 108 WordPerfect for Windows 3.5
OR BCOT 112 Microsoft Word for Windows (3.5)
BCOT 114 Introduction to Microsoft Office 3.5
BCOT 131 Beginning Typing/Keyboarding 3.5
OR BCOT 61 Typing/Keyboarding Review (2)
BCOT 133 Intermediate Typing/Keyboarding 3.5
BCOT 135 Typewriting Speed/Control Building (Two 9-week classes) 2
BCOT 162 Business Spelling and Proofreading Skills 3

TOTAL CERTIFICATE REQUIREMENTS: 31/32.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in General Office—253. Complete general education requirements and electives to achieve a minimum of 60 units.

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

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

See Cerritos College Graduation Requirements.

RECEPTIONIST
CERTIFICATE OF COMPLETION
DIVISION/DEPARTMENT REQUIREMENTS UNITS
BCOM 152 Job Search in the Business Field 1.5
BCOT 60 Telephone Techniques/Customer Service 1
BCOT 131 Beginning Typing/Keyboarding 3.5
OR BCOT 61 Typing/Keyboarding Review (2)
BCOT 161 Principles of Filing 1

TOTAL CERTIFICATE REQUIREMENTS: 5.5/7

NOTE: Although many of these courses are transferable, this Certificate of Completion is nontransferable.

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

See Cerritos College Graduation Requirements.

TRANSCRIPTIONIST—266
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 50 Advanced WordPerfect for Windows 3.5
or BCOT 51 Advanced Microsoft Word for Windows (3.5)
BCOT 108 WordPerfect for Windows 3.5
or BCOT 112 Microsoft Word for Windows (3.5)
BCOT 131 Beginning Typing/Keyboarding 3.5
or BCOT 61 Typing/Keyboarding Review (2)
BCOT 133 Intermediate Typing/Keyboarding 3.5
BCOT 135 Typewriting Speed/Control Building (Two 9-week classes) 2
BCOT 162 Business Spelling and Proofreading Skills 3
BCOT 163 Machine Transcription 4.5

TOTAL CERTIFICATE REQUIREMENTS: 29.5/31

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Transcriptionist—266. Complete general education requirements and electives to achieve a minimum of 60 units.

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

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

See Cerritos College Graduation Requirements.

TYPIST—267
CERTIFICATE OF ACHIEVEMENT
DIVISION/DEPARTMENT REQUIREMENTS UNITS
BCOM 46 Business Communications 3
BCOM 152 Job Search in the Business Field 1.5
BCOT 60 Telephone Techniques/Customer Service 1
BCOT 108 WordPerfect for Windows 3.5
or BCOT 112 Microsoft Word for Windows (3.5)
BCOT 131 Beginning Typing/Keyboarding 3.5
or BCOT 61 Typing/Keyboarding Review (2)
BCOT 135  Typewriting Speed/Control Building  
(Two 9-week classes) 2
BCOT 161  Principles of Filing  1
BCOT 162  Business Spelling and Proofreading Skills  3
TOTAL CERTIFICATE REQUIREMENTS:  17/18.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Typist - 267.
Complete general education requirements and electives to achieve a minimum of 60 units.
NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.

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

See Cerritos College Graduation Requirements.

WORD PROCESSOR—257
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 50  Advanced WordPerfect for Windows  3.5
BCOT 51  Advanced MicroSoft Word for Windows  3.5
BCOT 108  WordPerfect for Windows  3.5
BCOT 112  MicroSoft Word for Windows  3.5
BCOT 131  Beginning Typing/Keyboarding  3.5
OR BCOT 61  Typing/Keyboarding Review (2)
BCOT 133  Intermediate Typing/Keyboarding  3.5
BCOT 135  Typewriting Speed/Control Building  
(Two 9-week classes) 2
BCOT 155  Administrative Secretarial Procedures  4
BCOT 161  Principles of Filing  1
BCOT 162  Business Spelling and Proofreading Skills  3
BCOT 163  Machine Transcription  4.5
TOTAL CERTIFICATE REQUIREMENTS:  37.5/39

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Word Processing - 257.
Complete general education requirements and electives to achieve a minimum of 60 units.
NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.

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

SECRETARIAL PROGRAM
SECRETARY—252
CERTIFICATE OF ACHIEVEMENT
DIVISION/DEPARTMENT REQUIREMENTS UNITS
BCOM 147  Business Communications  3
BCOM 152  Job Search in the Business Field  1.5
BCOT 108  WordPerfect for Windows  3.5
OR BCOT 112  Microsoft Word for Windows  (3.5)
BCOT 114  Introduction to Microsoft Office  3.5
BCOT 133  Intermediate Typing/Keyboarding  3.5
BCOT 135  Typewriting Speed/Control Building  
(Two 9-week classes) 2
BCOT 155  Administrative Secretarial Procedures  4
BCOT 161  Principles of Filing  1
BCOT 162  Business Spelling and Proofreading Skills  3
BCOT 163  Machine Transcription  4.5
TOTAL CERTIFICATE REQUIREMENTS:  33

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Secretary - 252 and complete general education requirements and electives to achieve a minimum of 60 units.
NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.

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

SECRETARY/ADMINISTRATIVE ASSISTANT—265
CERTIFICATE OF ACHIEVEMENT
DIVISION/DEPARTMENT REQUIREMENTS
COMPLETION OF ALL THE REQUIRED COURSES LISTED IN SECRETARY-252 AND ADDITIONAL COURSES LISTED BELOW:
BCOT 50  Advanced WordPerfect for Windows  3.5
OR BCOT 51  Advanced Microsoft Word for Windows  (3.5)
TOTAL CERTIFICATE REQUIREMENTS:  33

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Secretary/Administrative Assistant - 265 and complete general education requirements and electives to achieve a minimum of 60 units.
NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.

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

EXECUTIVE SECRETARY/ADMINISTRATIVE ASSISTANT—248
CERTIFICATE OF ACHIEVEMENT
DIVISION/DEPARTMENT REQUIREMENTS
COMPLETION OF ALL THE REQUIRED COURSES LISTED IN SECRETARY-252 AND ADDITIONAL COURSES LISTED BELOW:
BCOT 108  WordPerfect for Windows  3.5
BCOT 110  Desktop Publishing-WordPerfect for Windows  1.5
OR BCOT 116  Desktop Publishing-Word for Windows  (1.5)
BCOT 112  MicroSoft Word for Windows  3.5
Choose 3.5 units from the following:
BCOT 50  Advanced WordPerfect for Windows  3.5
BCOT 51  Advanced Microsoft Word for Windows  3.5
TOTAL CERTIFICATE REQUIREMENTS:  41.5
ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Executive Secretary/Administrative Assistant - 248 and complete general education requirements and electives to achieve a minimum of 60 units.

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

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

MEDICAL TRANSCRIPTIONIST – 247 CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS UNITS
BCOM 147 Business Communications 3
BCOM 152 Job Search in the Business Field 1.5
BCOT 70 Medical Machine Transcription 4
BCOT 108 WordPerfect for Windows (3.5)
OR BCOT 112 Microsoft Word for Windows (3.5)
BCOT 133 Intermediate Typing/Keyboarding 3.5
BCOT 135 Typewriting Speed/Control Building 1
BCOT 162 Business Spelling and Proofreading Skills 3
MA 161 Medical Terminology 3

TOTAL CERTIFICATE REQUIREMENTS: 22.5

OPTIONAL SPECIALTIES
COMPLETION OF ALL THE COURSES LISTED IN MEDICAL TRANSCRIPTIONIST – 247 AND ADDITIONAL COURSES LISTED BELOW:

SECRETARY MEDICAL ENVIRONMENT
BCOT 71 Computers in the Medical Office 3.5
BCOT 155 Administrative Secretarial Procedures 4
BCOT 161 Principles of Filing 1

BILINGUAL SECRETARY – MEDICAL ENVIRONMENT
BCOT 71 Computers in the Medical Office 3.5
BCOT 155 Administrative Secretarial Procedures 4
BCOT 161 Principles of Filing 1
SPAN 223 Spanish for Careers 3

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Medical Transcriptionist – 247
Complete general education requirements and electives to achieve a minimum of 60 units.

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

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

BUSINESS LEGAL PROGRAM
PARALEGAL – 233

ASSOCIATE IN ARTS DEGREE

UNITS
Section A - Legal Specialty Core Requirements:
BL 56 Introduction to Computerized Legal Software 3
BL 100 Introduction to California Civil Procedures 3

BL 101 Introduction to Law 3
BL 102 Advanced California Civil Procedures 3
OR BL 113 Fundamentals of Alternate Dispute Resolutions (3)
BL 103 Legal Research 3
BL 107 Probate Procedures 3
OR BL 108 Family Law Procedures (3)
BL 120 Legal Ethics 1.5
OR BL 172 Business Paralegal Occupational Work Experience (2)

19.5/20

Section B - Legal Specialty Courses - 9 Units Required:
BL 102 Advanced California Civil Procedures 3
BL 104 Advanced Legal Research 3
BL 105 Introduction to Federal and California Employment, Labor, and Workers’ Compensation Law 3
BL 106 Bankruptcy Law 3
BL 107 Probate Procedures 3
BL 108 Family Law Procedures 3
BL 112 Estate Planning for the Paralegal 3
BL 113 Fundamentals of Alternate Dispute Resolutions 3
BL 115 Elder Law 3
BL 230 Corporate Law- 3

9

Section C - Legal Electives - 4 Units Required:
BA 111 Business Law 3
BL 52 Law Office Management 3
BL 57 Legal Document Production 3
BL 114 Law on the Internet 1.5
BL 174 Business Paralegal Occupational Work Experience 4
BL 220 Landlord and Tenant Law 3
BL 240 Tort Law 1.5
BL 250 Legal Interviewing 1.5
BUSR 125 Legal Aspects of Real Estate 3

4

32.5/33

TOTAL REQUIREMENTS MUST BE A MINIMUM OF

Complete the general education requirements to achieve a minimum of 60 units for an A.A. Degree in Paralegal. General Education courses must meet the American Bar Association Requirements. No course may be taken as “Credit by Exam.”

THIS PROGRAM IS APPROVED BY THE AMERICAN BAR ASSOCIATION

PARALEGAL SPECIALTY REQUIREMENTS
In order to obtain a paralegal specialty, the student must complete the Paralegal A.A. degree. The 7.5-12 units for the specialty may come from the Paralegal A.A. degree or from additional courses as outlined below:

OPTIONAL SPECIALTIES

COMMERCIAL
BL 106 Bankruptcy Law 3
BL 220 Landlord and Tenant Law 3
BL 230 Corporate Law- 3
BUSR 125 Legal Aspects of Real Estate 3

CRIMINAL
AJ 102 Concepts of Criminal Law 3
AJ 103 Criminal Procedures 3
AJ 202 Substantive Law- 3

PROBATE & ESTATE PLANNING
BL 107 Probate Procedures 3
BL 112 Estate Planning for the Paralegal 3
BUSR 125 Legal Aspects of Real Estate 3

LITIGATION
BL 102 Advanced California Civil Procedures 3
BL 104 Advanced Legal Research 3
BL 113 Fundamentals of Alternate Dispute Resolutions 3

FAMILY LAW
BL 102 Advanced California Civil Procedures 3
BL 104 Advanced Legal Research 3
BL 108 Family Law Procedures 3

LEGAL OFFICE PROCEDURES
BL 52 Law Office Management 3
BL 57 Legal Document Production 3
BL 250 Legal Interviewing 1.5

PARALEGAL CERTIFICATE:
A student may earn a Paralegal Certificate if the student has already completed an A.A. degree or B.A. degree prior to taking any courses applied to the Paralegal Certificate. The Paralegal Certificate is obtained by completing 21 units of any combination of paralegal courses listed in Section A. All 21 units must be taken at Cerritos College.

Students must consult with the Paralegal or Counseling Department prior to entering the certificate program. Any Business Legal courses which were taken prior to the completion of the student’s requisite A.A. degree will not be counted as part of the certificate units.

CAREER OPPORTUNITIES: Escrow Secretary (203.382-022), File Clerk (206.362-010), Insurance Clerk (219.387-014), Legal Assistant (119.267-022), Paralegal (119.267-026), Legal Secretary (201.362-010).

BUSINESS COURT REPORTING/ COMPUTERIZED SHORTHAND—235
The Court Reporters Board of California issues a certificate upon successful completion of the following requirements and passing of the state examination.

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

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

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

BUSINESS COURT REPORTING/ COMPUTERIZED SHORTHAND—235
The Court Reporters Board of California issues a certificate upon successful completion of the following requirements and passing of the state examination.

<table>
<thead>
<tr>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocational 80</td>
</tr>
<tr>
<td>English 135</td>
</tr>
<tr>
<td>Medical 125</td>
</tr>
<tr>
<td>Legal 175</td>
</tr>
<tr>
<td>Transcript Procedures 60</td>
</tr>
<tr>
<td>Apprenticeship Training 60</td>
</tr>
<tr>
<td>Technology 25</td>
</tr>
<tr>
<td>BUSC 114 Medical Terminology for Machine Shorthand 90</td>
</tr>
<tr>
<td>BUSC 115 Medical Shorthand for Court Reporters 90</td>
</tr>
<tr>
<td>BUSC 118 Deposition Procedures, Codes &amp; Ethics 110</td>
</tr>
<tr>
<td>BUSC 119A Beginning Computer-Aided Transcription 72</td>
</tr>
<tr>
<td>BUSC 119B Intermediate Computer-Aided Transcription 72</td>
</tr>
<tr>
<td>BUSC 119C Advanced Computer-Aided Transcription 72</td>
</tr>
<tr>
<td>BUSC 140 Computerized Shorthand Theory 108</td>
</tr>
<tr>
<td>BUSC 141 Computerized Shorthand Theory Review/Skill Development 108</td>
</tr>
<tr>
<td>BUSC 142 Intermediate Computerized Shorthand 108</td>
</tr>
<tr>
<td>BUSC 143 Computerized Shorthand Speed Building I 108</td>
</tr>
<tr>
<td>BUSC 144 Computerized Shorthand Speed Building II 108</td>
</tr>
<tr>
<td>BUSC 145 Computerized Shorthand Speed Building III 108</td>
</tr>
<tr>
<td>BUSC 146 Computerized Shorthand Speed Building (140-170 wpm) 108</td>
</tr>
<tr>
<td>BUSC 147 Computerized Shorthand Speed Building (160-190 wpm) 108</td>
</tr>
<tr>
<td>BUSC 148 Computerized Shorthand Speed Building (180-210 wpm) 108</td>
</tr>
<tr>
<td>BUSC 149 Computerized Shorthand Speed Building (190-225 wpm) 108</td>
</tr>
<tr>
<td>BUSC 185 CSR/RPR Examination Preparation 27</td>
</tr>
<tr>
<td>BUSC 192 Transcription Procedures 54</td>
</tr>
<tr>
<td>ENGL 107 Vocabulary Building 54</td>
</tr>
<tr>
<td>ENGL 108 Vocabulary Building for Professionals 36</td>
</tr>
</tbody>
</table>

Choose from the following courses for a minimum of 135 hours:

| BCOT 162 Business Spelling and Proofreading Skills 54 |
| BCOM 46 Business Communications 54 |
| BUSC 57A Beginning Aural Language Skills for Court Reporters 54 |
| BUSC 57B Advanced Aural Language Skills for Court Reporters 54 |
| ENGL 50A English Grammar 54 |
| ENGL 53 Punctuation, Capitalization and Spelling- 54 |
Choose from the following courses for a minimum of 175 hours:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJ 103</td>
<td>Criminal Procedures</td>
<td>54</td>
</tr>
<tr>
<td>BUSC 113</td>
<td>Legal Terminology</td>
<td>72</td>
</tr>
<tr>
<td>BUSC 116</td>
<td>Introduction to Courtroom Procedures</td>
<td>108</td>
</tr>
<tr>
<td>BA 111</td>
<td>Business Law</td>
<td>54</td>
</tr>
<tr>
<td>BA 112</td>
<td>Business Law</td>
<td>54</td>
</tr>
<tr>
<td>BL 101</td>
<td>Introduction to Law</td>
<td>54</td>
</tr>
</tbody>
</table>

Recommended typing courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCOT 131</td>
<td>Beginning Typing/Keyboarding</td>
<td>90</td>
</tr>
<tr>
<td>BCOT 135</td>
<td>Typewriting Speed/Control Building</td>
<td>54</td>
</tr>
</tbody>
</table>

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 50 verified hours of 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>BUSC 113</td>
<td>Legal Terminology</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 114</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 116</td>
<td>Introduction to Courtroom Procedures</td>
<td>4</td>
</tr>
<tr>
<td>BUSC 118</td>
<td>Deposition Procedures, Codes &amp; Ethics</td>
<td>4</td>
</tr>
<tr>
<td>BUSC 119A</td>
<td>Beginning Computer-Aided Transcription</td>
<td>2</td>
</tr>
<tr>
<td>BUSC 140</td>
<td>Computerized Shorthand Theory</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 141</td>
<td>Computerized Shorthand Theory Review</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 142</td>
<td>Intermediate Computerized Shorthand</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 143</td>
<td>Computerized Shorthand Speed Building I</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 147</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>31</td>
</tr>
</tbody>
</table>

CERTIFIED REALTIME REPORTER—234

CERTIFICATE OF ACHIEVEMENT

CLASSROOM CAPTIONING

STENO INTERPRETING

COURT REPORTING METHOD—236

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>BUSC 173/174</td>
<td>Business Court Reporting/Computerized Shorthand Occupational Work Experience</td>
<td>3/4</td>
</tr>
<tr>
<td>BCOT 108</td>
<td>WordPerfect for Windows</td>
<td>3.5</td>
</tr>
<tr>
<td>OR BCOT 112</td>
<td>Microsoft Word for Windows</td>
<td>(3.5)</td>
</tr>
<tr>
<td>CIS 121</td>
<td>Introduction to the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>LIB 100</td>
<td>Introduction to Library Resources</td>
<td>1</td>
</tr>
<tr>
<td>SL 101</td>
<td>Beginning Sign Language</td>
<td>3</td>
</tr>
</tbody>
</table>

*Minimum stenotype speed of 200 wpm.

NOTE: Students must pass a proficiency test to receive certificate.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements for a Certificate of Achievement in Certified Realtime Reporter. Also for an A.A. Degree a student must complete general education requirements and electives to achieve a minimum of 60 units

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

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

See Cerritos College Graduation Requirements.

Total Certificate Requirements: 40.5/41.5
Choose six units from the following:
- BCOT 162 Business Spelling and Proofreading Skills 3
- BCOM 46 Business Communications 3
- ENGL 50A English Grammar 3
- ENGL 53 Punctuation, Capitalization and Spelling 3

TOTAL CERTIFICATE REQUIREMENTS: 43/44

*Minimum stenotype speed of 180 wpm.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Classroom Captioning/Steno Interpreting-Court Reporting Method. Also for an A.A. Degree a student must complete general education requirements and electives to achieve a minimum of 60 units

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

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

See Cerritos College Graduation Requirements.

PROOFREADER-COURT REPORTING METHOD—264
CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS
- BUSC 57B Advanced Aural Language Skills for Court Reporters 3
- BUSC 113 Legal Terminology 3
- BUSC 114 Medical Terminology for Machine Shorthand 3
- OR MA 161 Medical Terminology 3
- BUSC 192 Transcription Procedures 2
- BCOT 162 Business Spelling and Proofreading Skills 3
- BCOM 46 Business Communications 3
- CIS 121 Introduction to the Internet 1.5
- LIB 100 Introduction to Library Resources 1

TOTAL CERTIFICATE REQUIREMENTS: 19.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Proofreader-Court Reporting Method. Also for an A.A. Degree a student must complete general education requirements and electives to achieve a minimum of 60 units

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

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

See Cerritos College Graduation Requirements.

SCOPIST/PROOFREADER-COURT REPORTING METHOD—260
CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS
- BUSC 57B Advanced Aural Language Skills for Court Reporters 3
- BUSC 113 Legal Terminology 3
- BUSC 114 Medical Terminology for Machine Shorthand 3
- OR MA 161 Medical Terminology 3
- BUSC 119B Intermediate Computer-Aided Transcription 2
- BUSC 119C Advanced Computer-Aided Transcription 2
- BUSC 141 Computerized Shorthand Theory Review/Skill Development 3
- BUSC 192 Transcription Procedures 2
- CIS 121 Introduction to the Internet 1.5
- LIB 100 Introduction to Library Resources 1

Choose 6 units from the following:
- BCOT 162 Business Spelling and Proofreading Skills 3
- BCOM 46 Business Communications 3
- ENGL 50A English Grammar 3
- ENGL 53 Punctuation, Capitalization and Spelling 3

TOTAL CERTIFICATE REQUIREMENTS: 44/45

*Minimum stenotype speed of 130 wpm.
*Minimum typing speed of 50 wpm.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Medical Transcription—Court Reporting Method. Also for an A.A. Degree a student must complete general education requirements and electives to achieve a minimum of 60 units

See Cerritos College Graduation Requirements.
Choose 3.5 units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCOT 108</td>
<td>WordPerfect for Windows</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 112</td>
<td>Microsoft Word for Windows</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS:** 30

*No minimum stenotype speed.
*Minimum typing speed of 35 wpm.

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**
Meet the requirements for a Certificate of Achievement in Scopist/Proofreader--Court Reporting Method. Also for an A.A. Degree a student must complete general education requirements and electives to achieve a minimum of 60 units

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

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

See Cerritos College Graduation Requirements.

**TEXT ENTRY—BUSINESS-COURT REPORTING METHOD—261**

**CERTIFICATE OF ACHIEVEMENT**

**DIVISION/DEPARTMENT REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSC 113</td>
<td>Legal Terminology</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 116</td>
<td>Introduction to Courtroom Procedures</td>
<td>4</td>
</tr>
<tr>
<td>BUSC 119A</td>
<td>Beginning Computer-Aided Transcription</td>
<td>2</td>
</tr>
<tr>
<td>BUSC 119B</td>
<td>Intermediate Computer-Aided Transcription</td>
<td>2</td>
</tr>
<tr>
<td>BUSC 119C</td>
<td>Advanced Computer-Aided Transcription</td>
<td>2</td>
</tr>
<tr>
<td>BUSC 119F</td>
<td>Computer-Aided Legal Dictionary Build</td>
<td></td>
</tr>
<tr>
<td>BUSC 139</td>
<td>Exploring Career Opportunities in Court Reporting</td>
<td>1</td>
</tr>
<tr>
<td>*BUSC 145</td>
<td>Computerized Shorthand Speed Building (140-170 wpm)</td>
<td>3</td>
</tr>
<tr>
<td>BA 112</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BCOT 108</td>
<td>WordPerfect for Windows</td>
<td>3.5</td>
</tr>
<tr>
<td>OR BCOT 112</td>
<td>Microsoft Word for Windows</td>
<td>(3.5)</td>
</tr>
<tr>
<td>CIS 121</td>
<td>Introduction to the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>ENGL 108</td>
<td>Vocabulary Building for Professionals</td>
<td>2</td>
</tr>
<tr>
<td>LIB 100</td>
<td>Introduction to Library Resources</td>
<td>1</td>
</tr>
</tbody>
</table>

Choose six units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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 50A</td>
<td>English Grammar</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 53</td>
<td>Punctuation, Capitalization and Spelling</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS:** 30

*Minimum stenotype speed of 120 wpm.

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**
Meet the requirements for a Certificate of Achievement in Text Entry--Police Reports-Court Reporting Method. Also for an A.A. Degree a student must complete general education requirements and electives to achieve a minimum of 60 units

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

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

See Cerritos College Graduation Requirements.

**TEXT ENTRY—POLICE REPORTS-COURT REPORTING METHOD—262**

**CERTIFICATE OF ACHIEVEMENT**

**DIVISION/DEPARTMENT REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSC 113</td>
<td>Legal Terminology</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 116</td>
<td>Introduction to Courtroom Procedures</td>
<td>4</td>
</tr>
<tr>
<td>BUSC 119A</td>
<td>Beginning Computer-Aided Transcription</td>
<td>2</td>
</tr>
<tr>
<td>BUSC 119B</td>
<td>Intermediate Computer-Aided Transcription</td>
<td>2</td>
</tr>
<tr>
<td>BUSC 119C</td>
<td>Advanced Computer-Aided Transcription</td>
<td>2</td>
</tr>
<tr>
<td>BUSC 119F</td>
<td>Computer-Aided Legal Dictionary Build</td>
<td></td>
</tr>
<tr>
<td>BUSC 139</td>
<td>Exploring Career Opportunities in Court Reporting</td>
<td>1</td>
</tr>
<tr>
<td>*BUSC 146</td>
<td>Computerized Shorthand Speed Building (140-170 wpm)</td>
<td>3</td>
</tr>
<tr>
<td>AJ 101</td>
<td>Introduction to Administration of Justice</td>
<td>3</td>
</tr>
<tr>
<td>AJ 103</td>
<td>Criminal Procedures</td>
<td>3</td>
</tr>
<tr>
<td>AJ 220</td>
<td>Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>BCOT 108</td>
<td>WordPerfect for Windows</td>
<td>3.5</td>
</tr>
<tr>
<td>OR BCOT 112</td>
<td>Microsoft Word for Windows</td>
<td>(3.5)</td>
</tr>
<tr>
<td>CIS 121</td>
<td>Introduction to the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>LIB 100</td>
<td>Introduction to Library Resources</td>
<td>1</td>
</tr>
</tbody>
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Choose six units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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 50A</td>
<td>English Grammar</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 53</td>
<td>Punctuation, Capitalization and Spelling</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS:** 40

*Minimum stenotype speed of 160 wpm.

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**
Meet the requirements for a Certificate of Achievement in Text Entry--Police Reports-Court Reporting Method. Also for an A.A. Degree a student must complete general education requirements and electives to achieve a minimum of 60 units

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

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

See Cerritos College Graduation Requirements.

**BUSINESS REAL ESTATE—270**

Class Completion Certificate: 3 units
Real Estate Department Award: 12/13 units
Real Estate Certificate of Achievement: 18/20 units
California Real Estate Certificate: 25/26 units
A.A. Degree in Business Real Estate: 60 units

**REAL ESTATE DEPARTMENT AWARD - 12/13 UNITS**

**REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSR 101</td>
<td>Real Estate Principles</td>
<td>3</td>
</tr>
<tr>
<td>USA 100</td>
<td>Introduction to Accounting</td>
<td>3</td>
</tr>
<tr>
<td>or BUSA 101</td>
<td>Fundamentals of Accounting I</td>
<td>(4)</td>
</tr>
<tr>
<td>BA 111</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BA 121</td>
<td>Sales</td>
<td>3</td>
</tr>
<tr>
<td>or BA 114</td>
<td>Marketing</td>
<td>(3)</td>
</tr>
<tr>
<td>or BA 110</td>
<td>Advertising</td>
<td>(3)</td>
</tr>
</tbody>
</table>

96
REAL ESTATE CERTIFICATE OF ACHIEVEMENT - 18/20 UNITS

Division/Department Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BUSR 101 Real Estate Principles</td>
<td>3</td>
</tr>
<tr>
<td>BUSR 173/174 Work Experience/Career Internship</td>
<td>3/4</td>
</tr>
</tbody>
</table>

Choose 12-13 units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BUSR 50 Introduction to Real Estate Software</td>
<td>3</td>
</tr>
<tr>
<td>BUSR 52 Mortgage Loan Brokering and Lending</td>
<td>3</td>
</tr>
<tr>
<td>BUSR 120 Real Estate Finance</td>
<td>3</td>
</tr>
<tr>
<td>BUSR 125 Legal Aspects of Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>BUSR 130 Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td>BUSR 131 Real Estate Appraisal</td>
<td>4</td>
</tr>
</tbody>
</table>

CALIFORNIA REAL ESTATE CERTIFICATE - 25/26 UNITS

State Requirement

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSR 101 Real Estate Principles</td>
<td>3</td>
</tr>
<tr>
<td>BUSR 120 Real Estate Finance</td>
<td>3</td>
</tr>
<tr>
<td>BUSR 125 Legal Aspects of Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>BUSR 130 Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td>BUSR 131 Real Estate Appraisal</td>
<td>4</td>
</tr>
<tr>
<td>BUSR 160 Real Estate Economics</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives: Select a minimum of 6 units from the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 111 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUSA 100 Introduction to Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUSA 101 Fundamentals of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>BUSR 50 Introduction to Real Estate Software</td>
<td>3</td>
</tr>
<tr>
<td>BUSR 52 Mortgage Loan Brokering and Lending</td>
<td>3</td>
</tr>
<tr>
<td>BUSR 173/174 Work Experience/Career Internship</td>
<td>3/4</td>
</tr>
</tbody>
</table>

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements for the California Real Estate Certificate and complete six units from the following: BA 121, BCOM 147, BUSF 125, BUSR 50, BUSR 51, BUSR 53, BUSR 140, BUSR 151 and complete general education requirements and electives to achieve a minimum of 60 units.

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

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

Real Estate License Requirements

1. Salesperson's License:
   To qualify for a real estate Salesperson's License, an applicant must have completed a college-level course in Real Estate Principles. Those who must satisfy this new requirement must also (either prior to issuance of the original license or within eighteen months after issuance) complete two additional basic real estate courses selected from among the following:
   - Real Estate Practice--Legal Aspects of Real Estate
   - Real Estate Appraisal--R.E. Economics OR Accounting
   - Real Estate Finance
   The remaining three courses to be selected from the following:
   - R.E. Office Administration--Adv. Legal Aspects of R.E.
   - Advanced R.E. Appraisal--Practices of Escrow
   - Real Estate Principles--Business Law
   - Property Management--Fundamentals of Escrow
   - Mortgage Loan Brokering and Lending
   - *Experience requirement is fulfilled by any one of the following:
     1. Two years as a real estate salesperson;
     2. Bachelors degree from an accredited college or university; or
     3. Two years employment in related industries such as escrow offices, banks, savings and loans, or building industries.
   
   NOTE: Effective 7/1/97, continuing education license renewal may be obtained by completing any one of the following three-unit college credit courses: Real Estate Practice, Legal Aspects of Real Estate, Property Management, and Real Estate Finance. In addition, every four years a three-hour seminar is required in each of the following areas: Ethics, Fair Housing, Agency Relationships, and Trustfund Banking.

Please see Business Counselors or Real Estate Department Chairman for additional licensing information.

REAL ESTATE SCHOLARSHIPS ARE AVAILABLE

Please see Business Counselors or Real Estate Department Chairman for further scholarship information.

CHEMISTRY—625 TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111 General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112 General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>MATH 170 Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 190 Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 100 Elementary Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 201 Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202 Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

ADDITIONAL LOWER DIVISION REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Dominguez Hills*

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 205 Quantitative Analysis Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220 Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
</tbody>
</table>

California State University - Fullerton*

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 220 Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 240 Calculus and Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 203 Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

California State University - Long Beach*

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200 Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 205 Quantitative Analysis Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220 Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 203 Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>
Curricula, Requirements for Majors, Certificates and Transfer Programs

Foreign Language: A competence is encouraged in reading scientific German, French, Russian, Chinese or Japanese.

California State University - Los Angeles*

- CHEM 205 Quantitative Analysis Chemistry 4
- CIS 178 Programming in Fortran 3
- MATH 220 Analytic Geometry and Calculus III 4
- PHYS 203 Engineering Physics 4

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

* See counselor for Bachelor of Arts Degree requirements.

University of California – Irvine

- CHEM 205 Quantitative Analysis Chemistry 4
- CHEM 211 Organic Chemistry 5
- CHEM 212 Organic Chemistry 5

Also, (4 or 5) transferable units. Courses in Biology, Engineering, Mathematics, Physics, and Computer Science. Courses in basic Physics, Pre-Physics, and Pre-Calculus are not acceptable.

Recommended:
- MATH 220 Analytic Geometry and Calculus III 4
- MATH 240 Calculus and Differential Equations 4

University of California – Los Angeles

- CHEM 211 Organic Chemistry 5
- CHEM 212 Organic Chemistry 5
- MATH 220 Analytic Geometry and Calculus III 4
- MATH 240 Calculus and Differential Equations 4

ASSOCIATE IN ARTS DEGREE REQUIREMENTS.

Complete 60 units to include (1) the above required courses and (2) Associate in arts Degree general education requirements.

CAREER OPPORTUNITIES: After transfer to a four-year college or university and completion of a Bachelor's Degree program, graduates qualify for graduate study in Chemistry or Biochemistry, and for careers in teaching, medicine and in industrial and governmental scientific endeavors.

See Cerritos College Graduation Requirements.

See State University General Education List.

CHICANO STUDIES—511

TRANSFER PROGRAM

Chicano Studies is an interdisciplinary program of study which fosters an awareness of the contributions and participation of Mexican Americans in United States society. In its broader applications, the program explores the historical, political, social, and psychological aspects of the Mexican American experience as a minority group.

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 106</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 225</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 111</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 112</td>
<td>5</td>
</tr>
</tbody>
</table>

SPAN 245 Introduction to Mexican American Culture 3

A Bachelor of Arts Degree in Mexican American Studies is offered at California State University, Los Angeles, Dominguez Hills. A Bachelor of Arts Degree in Chicano/Latino Studies is available at Long Beach. A Bachelor of Arts Degree in Chicano Studies is offered at Fullerton.

Recommended Courses within the Chicano Studies Program:
- PSYC 101, SOC 101, SOC 201, ANTH 2, GEOG 1, HIST 31.

COMMON LOWER DIVISION PREPARATION FOR THE UNIVERSITY OF CALIFORNIA

University of California – Los Angeles

One course in introduction to Chicano Life and Culture, one course in Chicanos in American Society, and the equivalent of five quarter terms in Spanish.

University of California – Riverside

SOC 210 American Minority Relations 3
or SOC 215 Sociology of Cultural Diversity: Challenge and Change (3)
SPAN 245 Introduction to Mexican American Culture 3

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Completion of 60 units to include (1) the above required courses, (2) the AA general education requirements, and (3) electives as needed.

CAREER OPPORTUNITIES: Completion of an upper division degree program can lead to employment as an elementary or secondary school teacher, school counselor, resource teacher, program coordinator; community, city, and state agencies; public utilities. This program also leads to advanced study in law, anthropology, and sociology.

See State University General Education List.

CHILD DEVELOPMENT/EARLY CHILDHOOD—965

PRESCHOOL TEACHER:

VERIFICATION OF COMPLETION (12 UNITS)

The following courses meet the minimum educational requirements under Title 22 (Department of Social Services) to qualify a student to teach in a state licensed preschool or child care program. The student must have taken the courses within the last 5 years and must have attained a grade of “C” or better in each course. In addition, to qualify for this verification, the student must complete 3 out of 4 courses at Cerritos College.*

COURSES UNITS
- CD 110 Child Development- 3
- CDEC 111 Principles and Practices in Early Childhood Education 3
- CDEC 112 Early Childhood Education Curriculum 3
- CDEC 113 The Child, Family, and Community 3

* See Cerritos College Graduation Requirements.
**PRESCHOOL DIRECTOR:**  
**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 child care program. The student must have taken the courses within the last 5 years and must have attained a grade of "C" or better in each course.

In addition, to qualify for this verification, student must complete 4 out of 5 courses at Cerritos College. For employment, the Department of Social Services will also require four years of teaching experience in a preschool or child care program. *

<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110 Child Development</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 66 Administration and Supervision of Early Childhood Education Programs</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 111 Principles and Practices in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 112 Early Childhood Education Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 113 The Child, Family, and Community</td>
<td>3</td>
</tr>
</tbody>
</table>

**SCHOOL-AGE CHILD CARE:**  
**VERIFICATION OF COMPLETION (24 UNITS)**  
The following courses meet the minimum educational requirement for the Department of Social Services for school-age child caregivers. The student must have taken the courses within the last 5 years and must have attained a grade of "C" or higher in each course. Six (6) out of eight (8) courses must be completed at Cerritos College. *

<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 50 Arts and Crafts for School-Age Children</td>
<td>2</td>
</tr>
<tr>
<td>CD 110 Child Development</td>
<td>3</td>
</tr>
<tr>
<td>CD 115 Parent School Partnerships</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 61 Nutrition, Health, &amp; Safety in Children's Programs</td>
<td>2</td>
</tr>
<tr>
<td>CDEC 63 Early Childhood Experiences in Language Arts and Social Sciences</td>
<td>2</td>
</tr>
<tr>
<td>CDEC 113 The Child, Family, and Community</td>
<td>3</td>
</tr>
<tr>
<td>CDSA 152 School-Age Child Care Supervision and Administration</td>
<td>3</td>
</tr>
<tr>
<td>CDSA 155 School-Age Child Care Activities</td>
<td>3</td>
</tr>
<tr>
<td>CDSA 259 School-Age Child Care Practicum</td>
<td>3</td>
</tr>
</tbody>
</table>

**INFANT/ TODDLER TEACHER:**  
**VERIFICATION OF COMPLETION (18 UNITS)**  
The following courses meet the minimum education requirement for the Department of Social Services for infant/toddler caregivers. The student must have taken courses within the last 5 years and must have attained a grade of "C" or higher in each course. Four (4) out of five (5) courses must be completed at Cerritos College. *

<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110 Child Development</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 111 Principles and Practices in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 112 Early Childhood Education Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 113 The Child, Family, and Community</td>
<td>3</td>
</tr>
<tr>
<td>CDIT 51 Infant and Toddler Development</td>
<td>3</td>
</tr>
<tr>
<td>CDIT 52 Infant and Toddler Programs</td>
<td>3</td>
</tr>
</tbody>
</table>

**FAMILY CHILD CARE:**  
**VERIFICATION OF COMPLETION (11 UNITS)**  
To qualify for this verification, student must complete 3 out of 4 courses at Cerritos College. The student must have taken the courses within the last five years and must have attained a grade of "C" or higher in each course. *

<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110 Child Development</td>
<td>3</td>
</tr>
<tr>
<td>CDIT 51 Infant and Toddler Development</td>
<td>3</td>
</tr>
<tr>
<td>CDIT 52 Infant and Toddler Programs</td>
<td>3</td>
</tr>
<tr>
<td>CDSA 155 School-Age Child Care Activities</td>
<td>3</td>
</tr>
</tbody>
</table>

**CHILD DEVELOPMENT/ EARLY CHILDHOOD CERTIFICATE OF ACHIEVEMENT**  
In order to receive the Certificate of Achievement, all courses must be completed with a grade of "C" or higher. *

<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110 Child Development</td>
<td>3</td>
</tr>
<tr>
<td>CD 124 The Child in a Pluralistic Society</td>
<td>3</td>
</tr>
<tr>
<td>CD 137 Positive Child Guidance</td>
<td>1.5</td>
</tr>
<tr>
<td>CD 138 Observation and Assessment of Childhood Behavior</td>
<td>1.5</td>
</tr>
<tr>
<td>CDEC 111 Principles and Practices in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 112 Early Childhood Education Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 113 The Child, Family, and Community</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 61 Nutrition, Health, and Safety in Children's Programs</td>
<td>2</td>
</tr>
<tr>
<td>CDEC 62 Creativity and the Preschool Child</td>
<td>2</td>
</tr>
<tr>
<td>CDEC 63 Early Childhood Experiences in Language Arts and Social Sciences</td>
<td>2</td>
</tr>
<tr>
<td>CDEC 64 Early Childhood Education Practicum-</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 65 Music and Movement for Young--Children</td>
<td>2</td>
</tr>
<tr>
<td>CDEC 133 Early Childhood Experiences in Math and Sciences</td>
<td>2</td>
</tr>
<tr>
<td>CDEC 173 Early Childhood Education Occupational Work Experience (or)174</td>
<td>3-4</td>
</tr>
</tbody>
</table>

Choose (1) of the following courses:

<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 115 Parent School Partnerships</td>
<td>3</td>
</tr>
<tr>
<td>CDIT 51 Infant and Toddler Development</td>
<td>3</td>
</tr>
<tr>
<td>CDIT 52 Infant and Toddler Programs</td>
<td>3</td>
</tr>
<tr>
<td>CDSA 155 School-Age Child Care Activities</td>
<td>3</td>
</tr>
<tr>
<td>CDS 50 Survey of Special Education</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 230 Adult Supervision in Child Care Programs</td>
<td>3</td>
</tr>
</tbody>
</table>

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**  
Meet the above requirements for a Certificate of Achievement. Plus, for an AA Degree, a student must complete PSYCH 101 and general education requirements to achieve a minimum of 60 units. *

**RECOMMENDED ELECTIVES:** CDSE 50, CD 50, CDIT 51, CDIT 52, CDSA 155, CDS 52, CDPE 10, EDT 1, EDT 3, EDT 7

See Cerritos College Graduation Requirements.
CHILD DEVELOPMENT/
PRESCHOOL DIRECTOR—970
CERTIFICATE OF ACHIEVEMENT

To receive a Certificate of Achievement, the student must complete the Certificate of Achievement requirements listed in Child Development/Early Childhood and the following courses:

<table>
<thead>
<tr>
<th>UNITS</th>
<th>COURSE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the above requirements for a Certificate of Achievement. Plus, for an AA Degree, a student must complete PSYCH 101 and general education requirements to achieve a minimum of 60 units.

RECOMMENDED ELECTIVES: CDSE 50, CD 51, CDIT 51, CDIT 52, CDSE 52, CDSA 155, CDPE 10, EDT 1, EDT 100, EDT 104.

See Cerritos College Graduation Requirements.

* 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.

CHILD DEVELOPMENT/
SPECIAL EDUCATION—966
CERTIFICATE OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>UNITS</th>
<th>COURSE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Special Education Assistant. Plus, for an A.A. Degree, a student must take SL 51, electives and general education requirements to achieve a minimum of 60 units.

CAREER OPPORTUNITIES: Employment as teacher's assistant with children and adults who are developmentally disabled, physically, neurologically, or emotionally handicapped, etc.

See Cerritos College Graduation Requirements.

COMPUTER AND INFORMATION SCIENCES PROGRAMS

COMPUTER AND INFORMATION SCIENCES OPERATOR—283
CERTIFICATE OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>UNITS</th>
<th>COURSE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

See Cerritos College Graduation Requirements.

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

**COMPUTER AND INFORMATION SCIENCES**

**PROGRAMMER—284**

**CERTIFICATE OF ACHIEVEMENT**

**DIVISION/DEPARTMENT REQUIREMENTS UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>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</td>
<td>(3)</td>
</tr>
<tr>
<td></td>
<td>Applications Software</td>
<td></td>
</tr>
<tr>
<td>CIS 103</td>
<td>Computer Programming Logic</td>
<td>3</td>
</tr>
<tr>
<td>CIS 171</td>
<td>Visual BASIC Programming</td>
<td>3</td>
</tr>
<tr>
<td>OR CIS 180</td>
<td>Programming in C/C++</td>
<td>(3)</td>
</tr>
<tr>
<td>OR CIS 182</td>
<td>JAVA Programming</td>
<td>(3.5)</td>
</tr>
<tr>
<td>CIS 175</td>
<td>RPG Programming</td>
<td>3</td>
</tr>
<tr>
<td>OR CIS 176</td>
<td>COBOL Programming</td>
<td>(3)</td>
</tr>
<tr>
<td>CIS 207</td>
<td>SQL Programming</td>
<td>3</td>
</tr>
<tr>
<td>OR CIS 253</td>
<td>Client/Server Development -- with Powerbuilder</td>
<td>(3)</td>
</tr>
<tr>
<td>OR CIS 222</td>
<td>Advanced RPG Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>OR CIS 224</td>
<td>Advanced COBOL Programming</td>
<td>(3)</td>
</tr>
<tr>
<td>OR CIS 221</td>
<td>Advanced Visual Basic</td>
<td>(3.5)</td>
</tr>
<tr>
<td>OR CIS 280</td>
<td>Object-Oriented Programming in C++</td>
<td>(3)</td>
</tr>
<tr>
<td>OR CIS 282</td>
<td>Advanced JAVA Programming</td>
<td>(3.5)</td>
</tr>
<tr>
<td>BCOM 147**</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choose 12 units from the following courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1S 105</td>
<td>Using Microsoft Windows</td>
<td>1.5</td>
</tr>
<tr>
<td>C1S 121</td>
<td>Introduction to Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>C1S 125</td>
<td>JAVA SCRIPT Programming</td>
<td>1.5</td>
</tr>
<tr>
<td>C1S 140</td>
<td>Query/400</td>
<td>1</td>
</tr>
<tr>
<td>C1S 141</td>
<td>AS/400 Operations</td>
<td>3</td>
</tr>
<tr>
<td>C1S 170</td>
<td>Programming in BASIC</td>
<td>3</td>
</tr>
<tr>
<td>C1S 171</td>
<td>Visual BASIC Programming</td>
<td>3</td>
</tr>
<tr>
<td>C1S 180</td>
<td>Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>C1S 182</td>
<td>JAVA Programming</td>
<td>(3.5)</td>
</tr>
<tr>
<td>C1S 195</td>
<td>Business Data Communications Systems</td>
<td>3</td>
</tr>
<tr>
<td>C1S 201</td>
<td>Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>C1S 205</td>
<td>Programming in HTML for the World Wide Web</td>
<td>1.5</td>
</tr>
<tr>
<td>C1S 207</td>
<td>SQL Programming</td>
<td>3</td>
</tr>
<tr>
<td>C1S 210</td>
<td>Local Area Network</td>
<td>3</td>
</tr>
<tr>
<td>C1S 212</td>
<td>Windows 2000 Professional and Server</td>
<td>3</td>
</tr>
<tr>
<td>C1S 214</td>
<td>UNIX</td>
<td>3</td>
</tr>
<tr>
<td>C1S 220</td>
<td>Windows Programming</td>
<td>3</td>
</tr>
<tr>
<td>C1S 221</td>
<td>Advanced Visual Basic</td>
<td>3.5</td>
</tr>
<tr>
<td>C1S 222</td>
<td>Advanced RPG Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>C1S 224</td>
<td>Advanced COBOL Programming</td>
<td>3</td>
</tr>
<tr>
<td>C1S 253</td>
<td>Client/Server Development with Powerbuilder</td>
<td>3</td>
</tr>
<tr>
<td>C1S 273/274</td>
<td>CIS Occupational Work Experience</td>
<td>3(4)</td>
</tr>
<tr>
<td>C1S 280</td>
<td>Object-Oriented Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>C1S 282</td>
<td>Advanced JAVA Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>C1S 284</td>
<td>CGI and PERL Programming</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS:** 36/37

*Meets general education requirement, may substitute MATH 60
**Meets general education requirement, may substitute ENGL 100

NOTE: CIS 52, 101, 102, or 103 meet A.A. Degree general education communication and analytic thinking requirement.

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

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

See Cerritos College Graduation Requirements.

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

Please see counselors or the respective department for additional alternatives.

**COMPUTER AND INFORMATION SCIENCES**

**SYSTEMS ANALYST—285**

**CERTIFICATE OF ACHIEVEMENT**

**DIVISION/DEPARTMENT REQUIREMENTS UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 52*</td>
<td>Data Processing Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>CIS 53</td>
<td>Microsoft Powerpoint</td>
<td>1.5</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</td>
<td>(3)</td>
</tr>
<tr>
<td></td>
<td>Applications Software</td>
<td></td>
</tr>
<tr>
<td>CIS 103</td>
<td>Computer Programming Logic</td>
<td>3</td>
</tr>
<tr>
<td>CIS 171</td>
<td>Visual BASIC Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 180</td>
<td>Programming in C/C++</td>
<td>(3)</td>
</tr>
<tr>
<td>CIS 182</td>
<td>JAVA Programming</td>
<td>(3.5)</td>
</tr>
<tr>
<td>CIS 201</td>
<td>Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS 205</td>
<td>Programming in HTML for the World Wide Web</td>
<td>1.5</td>
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<tr>
<td>CIS 207</td>
<td>SQL Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 210</td>
<td>Local Area Network</td>
<td>3</td>
</tr>
<tr>
<td>CIS 212</td>
<td>Microsoft Windows NT</td>
<td>3</td>
</tr>
<tr>
<td>CIS 214</td>
<td>UNIX</td>
<td>3</td>
</tr>
<tr>
<td>CIS 220</td>
<td>Windows Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 221</td>
<td>Advanced Visual Basic</td>
<td>3.5</td>
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<tr>
<td>CIS 222</td>
<td>Advanced RPG Programming</td>
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<tr>
<td>CIS 224</td>
<td>Advanced COBOL Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 253</td>
<td>Client/Server Development with Powerbuilder</td>
<td>3</td>
</tr>
<tr>
<td>OR CIS 155</td>
<td>Microsoft Access</td>
<td>(3)</td>
</tr>
<tr>
<td>BCOM 147**</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Choose 6 units from the following courses:</td>
<td></td>
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<tr>
<td>CIS 56</td>
<td>Microcomputer Disk Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 141</td>
<td>AS/400 Operations</td>
<td>3</td>
</tr>
<tr>
<td>CIS 151</td>
<td>Microsoft Excel</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 171</td>
<td>Visual BASIC Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 207</td>
<td>SQL Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 210</td>
<td>Local Area Networks</td>
<td>3</td>
</tr>
<tr>
<td>CIS 212</td>
<td>Microsoft Windows NT</td>
<td>3</td>
</tr>
<tr>
<td>CIS 214</td>
<td>UNIX</td>
<td>3</td>
</tr>
<tr>
<td>CIS 220</td>
<td>Windows Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 222</td>
<td>Advanced RPG Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 224</td>
<td>Advanced COBOL Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 253</td>
<td>Client/Server Development with Powerbuilder</td>
<td>3</td>
</tr>
<tr>
<td>C1S 273/274</td>
<td>BCIS Occupational Work Experience</td>
<td>3(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 284</td>
<td>CGI and PERL Programming</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS:** 36/37

*Meets general education requirement, may substitute MATH 60
**Meets general education requirement, may substitute ENGL 100

NOTE: CIS 52, 101, 102, or 103 meet A.A. Degree general education communication and analytic thinking requirement.
CIS 280  Object-Oriented Programming in C++  3

TOTAL CERTIFICATE REQUIREMENTS:  37.5

*Meets A.A. general education requirement, may substitute MATH 60
**Meets A.A. general education requirement, may substitute ENGL 100
NOTE: CIS 52, 101, 102, or 103 meet A.A. Degree general education communication and analytic thinking.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Computer and Information Sciences—Systems Analyst and complete general education requirements and electives to achieve a minimum of 60 units.

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

Please see counselors or the respective department for additional alternatives.

COMPUTER AND INFORMATION SCIENCES
MICROCOMPUTER SPECIALIST—286

CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS  UNITS
CIS 52*  Data Processing Mathematics  3
CIS 53  Microsoft Powerpoint  1.5
OR CIS 110  Introduction to Desktop Publishing Microsoft Publisher  (1.5)
CIS 56  Microcomputer Disk Operating Systems  3
CIS 102  Introduction to Microcomputer Hardware and Applications Software  3
CIS 103  Computer Programming Logic  3
CIS 105  Using Microsoft Windows  1.5
CIS 151  Microsoft Excel  3.5
CIS 155  Microsoft Access  3
CIS 171  Visual BASIC Programming  3
BCOM 147**  Business Communications  3

Choose 9 units from the following courses:
CIS 53  Microsoft Powerpoint  1.5
CIS 110  Introduction to Desktop Publishing Microsoft Publisher  1.5
CIS 121  Introduction to Internet  1.5
CIS 170  Programming in BASIC  3
CIS 180  Programming in C/C++  3
CIS 182  JAVA Programming  3.5
CIS 195  Business Data Communications Systems  3
CIS 201  Systems Analysis and Design  3
CIS 205  Programming in HTML for the World Wide Web  1.5
CIS 210  Local Area Networks  3
CIS 212  Microsoft Windows NT  3
CIS 214  UNIX  3
CIS 220  Windows Programming  3
CIS 273/274  BCIS Occupational Work Experience  3/4
CIS 280  Object-Oriented Programming in C++  3

TOTAL CERTIFICATE REQUIREMENTS:  36.5

*Meets A.A. Degree general education requirement, may substitute MATH 60
**Meets A.A. Degree general education requirement, may substitute ENGL 100
NOTE: CIS 52, 101, 102, or 103 meet A.A. Degree general education communication and analytic thinking requirement.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for Certificate of Achievement in Computer and Information Sciences Microcomputer Specialist and complete general education requirements and electives to achieve a minimum of 60 units.

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

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

**COMPUTER AND INFORMATION SCIENCES**

**WEB MASTER—288**

**CERTIFICATE OF ACHIEVEMENT**

**DIVISION/DEPARTMENT REQUIREMENTS**

**UNITS**

- **CIS 52**  
  Data Processing Mathematics 3
- **CIS 120**  
  Web Design with Microsoft Frontpage 1.5
- **CIS 121**  
  Introduction to the Internet 1.5
- **CIS 125**  
  Javascript Programming 1.5
- **CIS 155**  
  Microsoft Access 3
- **CIS 182**  
  Java Programming 3.5
- **CIS 205**  
  Programming in HTML for the World Wide Web 1.5
- **CIS 284**  
  CGI and PERL Programming 3.5
- **ART 186**  
  Computer Graphics in Art and Design 3
- **OR ART 188**  
  Design for Desktop Publishing--3

Choose 6-6.5 units from the following courses:

- **CIS 53**  
  Microsoft PowerPoint 1.5
- **CIS 110**  
  Introduction to Desktop Publishing - Microsoft Publisher 1.5
- **CIS 171**  
  Visual Basic Programming 3
- **CIS 207**  
  SQL Programming 3
- **CIS 280**  
  Object-Oriented Programming in C++ 3
- **CIS 282**  
  Advanced Java Programming 3.5
- **ART 186**  
  Computer Graphics in Art and Design 3
- **OR ART 188**  
  Design for Desktop Publishing--3
- **ART 194**  
  Multimedia Design 3
- **ART 195**  
  3D Computer Modeling 3
- **JOUR 120**  
  Internet for Journalists 2

**TOTAL CERTIFICATE REQUIREMENTS** 34/34.5

*Meets general education requirement, may substitute MATH 60
**Meets A.A. Degree general education requirement, may substitute ENGL 100

**NOTE:** CIS 52 meets A.A. Degree general education communication and analytical thinking requirement.

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

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

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

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

**COMPUTER SCIENCE—610**

**TRANSFER PROGRAM**

**LOWER DIVISION MAJOR REQUIREMENTS**

**FOR SPECIFIC TRANSFER INSTITUTIONS**

**NOTE:** Computer Science is a rapidly changing field. Contact a Cerritos College Counselor in order to optimize preparation for transfer.

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

**UNITS**

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

**California State University - Dominguez Hills**

- **CIS 180**  Programming in C/C++ 3
- **CIS 230**  Assembly Programming for Microcomputers 4
- **PHYS 201**  Engineering Physics 4
- **PHYS 202**  Engineering Physics 4

**California State University - Long Beach**

- **CIS 180**  Programming in C/C++ 3
- **OR CIS 280**  Object-Oriented Programming in C++ 3
- **ENGL 100**  Freshman Composition 3
- **MATH 220**  Analytic Geometry and Calculus III 4
- **PHYS 201**  Engineering Physics 4
- **PHYS 202**  Engineering Physics 4

**California State University - Los Angeles**

- **CIS 177**  Programming in Pascal 3
- **CIS 230**  Assembly Programming for Microcomputers 4
- **CIS 292**  Data Structures 4
- **MATH 112**  Elementary Statistics 4
- **PHYS 201**  Engineering Physics 4
- **PHYS 202**  Engineering Physics 4

**California State University - Fullerton**

- **CIS 214**  Unix 3
- **CIS 230**  Assembly Programming for Microcomputers 4
- **CIS 280**  Object-Oriented Programming in C++ 3
- **CIS 292**  Data Structures 4
- **PHYS 201**  Engineering Physics 4
- **PHYS 202**  Engineering Physics 4
- **OR CHEM 111**  General Chemistry 5
- **CHEM 112**  General Chemistry 5
- **OR GEOL 101**  The Earth & Environment 4
- **OR GEOL 201**  Earth History 4
- **BIOL 120**  Introduction to Biological Sciences 4
- **OR BIOL 200**  Principles of Biology 5
- **AND BIOL 201**  Principles of Biology 5

**California State Polytechnic University - Pomona**

- **CIS 180**  Programming in C/C++ 3
- **OR CIS 280**  Object-Oriented Programming in C++ 3
- **CIS 182**  JAVA Programming 3.5
- **CIS 230**  Assembly Programming for Microcomputers 4
- **CIS 282**  Advanced JAVA Programming 3.5
- **CHEM 111**  General Chemistry 5
- **PHYS 201**  Engineering Physics 4
- **PHYS 202**  Engineering Physics 4
- **PHYS 203**  Engineering Physics 4

**Recommended Courses**

- **MATH 220**  Analytical Geometry and Calculus III 4
- **MATH 240**  Calculus and Differential Equations 4

**University of California - Irvine**

(Information and Computer Science)

- **CIS 180**  Programming in C/C++ 3
- **AND CIS 280**  Object-Oriented Programming in C++ 3
MAJOR REQUIREMENTS

FULL TIME (8:30 a.m. to 5:00 p.m. Monday through Friday)

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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>COS 50</td>
<td>Introductory Cosmetology</td>
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</tr>
<tr>
<td>COS 51</td>
<td>Intermediate Cosmetology</td>
<td>19.5</td>
</tr>
<tr>
<td>COS 52</td>
<td>Advanced Cosmetology</td>
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PART TIME—EVENING (5:30-10:30 p.m. Monday through Thursday)

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<tr>
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<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COS 60A</td>
<td>Introductory Cosmetology Theory &amp; Manipulation</td>
<td>10</td>
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<tr>
<td>COS 60B</td>
<td>Introductory Cosmetology II</td>
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<td>COS 61A</td>
<td>Intermediate Cosmetology I</td>
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<tr>
<td>COS 61B</td>
<td>Intermediate Cosmetology II</td>
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</tr>
<tr>
<td>COS 62A</td>
<td>Advanced Cosmetology I</td>
<td>10</td>
</tr>
<tr>
<td>COS 62B</td>
<td>Advanced Cosmetology II</td>
<td>10</td>
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</table>

COS 53 may be repeated for a maximum of 16 units as necessary to complete the 1600 hours required by the State Board of Cosmetology.

**Vocational and Professional Opportunities at Completion of Program and after obtaining the Cosmetologist License: Cosmetologist, manager of a salon, hairstylist, owner of a salon, makeup artist, cosmetic demonstrator, tint technician.**

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

THE CERTIFICATE OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COS 50</td>
<td>Introductory Cosmetology</td>
<td>19.5</td>
</tr>
<tr>
<td>COS 51</td>
<td>Intermediate Cosmetology</td>
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<td>COS 52</td>
<td>Advanced Cosmetology</td>
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MINIMUM UNITS REQUIRED 58.50
MINIMUM HOURS REQUIRED 1600

*Part-time evening students will substitute Cos 60A, 60B, 61A, 61B, 62A, 62B, for 50, 51, and 52.

Cos 53 may be repeated for a maximum of 16 units as necessary to complete the 1600 hours required by the State Board of Cosmetology.

Employment Opportunities upon Completion of the Program: Beautician or Hair Stylist in Cosmetology.

COURT REPORTING  SEE BUSINESS COURT REPORTING
CULINARY ARTS
CHEF'S TRAINING—954
CERTIFICATE OF ACHIEVEMENT PROGRAM

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>CA 52</td>
<td>Food Production</td>
<td>9.5</td>
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<tr>
<td>CA 53</td>
<td>Commercial Food Production: Pantry Items</td>
<td>9.5</td>
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<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 101</td>
<td>Introduction to Food Service Safety &amp; Sanitation</td>
<td>2</td>
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</table>

TOTAL CERTIFICATE UNITS: 33.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete 60 units to include HO 151, (1) the above requirements for the Certificate of Achievement, (2) the Associate in Arts Degree requirements, and one semester of work experience, and (3) electives as needed.

Additional Expenses: Students will be required to purchase a set of knives and two sets of uniforms.

CAREER OPPORTUNITIES: Employment in the food industry as sous chef, chef steward. Also short order cook, pantry person, garde helper, roast cook.

See Cerritos College Graduation Requirements.

CULINARY ARTS
PROFESSIONAL BAKING—955
CERTIFICATE OF ACHIEVEMENT PROGRAM

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<tbody>
<tr>
<td>CA 60</td>
<td>Foods Purchase and Control</td>
<td>3</td>
</tr>
<tr>
<td>CA 80</td>
<td>Introduction to Baking Skill</td>
<td>4</td>
</tr>
<tr>
<td>CA 81</td>
<td>Professional Baking &amp; Pastry Production I</td>
<td>5</td>
</tr>
<tr>
<td>CA 82</td>
<td>Professional Baking &amp; Pastry Production II</td>
<td>5</td>
</tr>
<tr>
<td>CA 85</td>
<td>Advanced Professional Pastry Design &amp; Decorating</td>
<td>3</td>
</tr>
<tr>
<td>CA 101</td>
<td>Introduction to Food Service Safety &amp; Sanitation</td>
<td>2</td>
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</tbody>
</table>

TOTAL CERTIFICATE UNITS: 22

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the above requirements for Certificate of Achievement and HO 151. Plus for an A.A. Degree the student must complete the A.A. Degree general education requirements; and electives to achieve a minimum of 60 units.

CAREER OPPORTUNITIES: Employment as a professional baker, pastry chef, pastry cook, and specialty baker.

DANCE—136
TRANSFER PROGRAM

The Dance Department provides a major of study with emphasis in Modern, Jazz and Ballet techniques, composition and performance. It gives the General Education student and the student in closely related areas, experience in dance as an art form.

The following core of courses will provide the dance student with a solid background for upper division work and a transfer curriculum.

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>PE 182A</td>
<td>Modern Dance (Beginning)</td>
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<tr>
<td>PE 182B</td>
<td>Modern Dance (Intermediate)</td>
<td>2</td>
</tr>
<tr>
<td>PE 186A</td>
<td>Ballet (Beginning)</td>
<td>2</td>
</tr>
<tr>
<td>PE 186B</td>
<td>Ballet (Intermediate)</td>
<td>2</td>
</tr>
<tr>
<td>PE 191</td>
<td>History of Dance</td>
<td>3</td>
</tr>
<tr>
<td>TH 140</td>
<td>Theatre Dance - Beginning Jazz</td>
<td>2</td>
</tr>
<tr>
<td>TH 141</td>
<td>Theatre Dance - Intermediate Jazz</td>
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LOWER DIVISION MAJOR REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS

California State University—Dominguez Hills

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<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>PE 116</td>
<td>Professional Activities for Modern Dance</td>
<td>3</td>
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<tr>
<td>PE 181</td>
<td>Introduction to Dance Cultures of the World</td>
<td>2</td>
</tr>
<tr>
<td>TH 140</td>
<td>Theatre Dance - Beginning Jazz</td>
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California State University—Fullerton

<table>
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<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>PE 184</td>
<td>Choreography Improvisation</td>
<td>3</td>
</tr>
<tr>
<td>PE 187</td>
<td>Dance Repertory</td>
<td>2</td>
</tr>
<tr>
<td>PE 188</td>
<td>Dance Performance</td>
<td>2</td>
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University of California—Irvine

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<tr>
<th>COURSE</th>
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<tr>
<td>PE 184</td>
<td>Choreography Improvisation</td>
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<tr>
<td>PE 190</td>
<td>Dance Notations (lecture)</td>
<td>3</td>
</tr>
<tr>
<td>TH 110</td>
<td>Fundamentals of Acting-</td>
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<table>
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<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
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<td>PE 184</td>
<td>Choreography Improvisation</td>
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<tr>
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<td>Dance Notations (lecture)</td>
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</tr>
<tr>
<td>TH 110</td>
<td>Fundamentals of Acting</td>
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<td>TH 110</td>
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<tr>
<td>PE 190</td>
<td>Dance Notations (lecture)</td>
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</tr>
<tr>
<td>TH 110</td>
<td>Fundamentals of Acting</td>
<td>3</td>
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</table>

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>PE 184</td>
<td>Choreography Improvisation</td>
<td>3</td>
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<tr>
<td>PE 190</td>
<td>Dance Notations (lecture)</td>
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<tr>
<td>TH 110</td>
<td>Fundamentals of Acting</td>
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<tr>
<th>COURSE</th>
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<tr>
<td>PE 184</td>
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<td>3</td>
</tr>
<tr>
<td>TH 110</td>
<td>Fundamentals of Acting</td>
<td>3</td>
</tr>
</tbody>
</table>

*STUDENTS WISHING TO MAJOR OR MINOR IN DANCE MUST AUDITION FOR PLACEMENT AT EACH OF THE UNIVERSITIES.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete the above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all A.A. degree general education requirements for a total of least 60 units.

RECOMMENDED ELECTIVES: PE 184, PE 187, PE 188

CAREER OPPORTUNITIES: Completion of an upper division degree program can lead to employment as a teacher at the secondary, community college or university level in both public and private schools; a performer in dance companies, on television or in dance films/choreographer. Students majoring in such areas as Recreation, Theatre, Physical Education, Fine Arts and Elementary Education would also benefit from the courses within this Dance curriculum.

See Cerritos College Graduation Requirements.
DENTAL ASSISTING—952

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). 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 Diploma or satisfactory scores on the General Education Development Examination (given at most Adult Education Centers).
   b. 2.0 Grade Point Average in all High School and College courses or consent of the Dental Assisting Department.
   c. Achieve a satisfactory score in English on the college placement test or clear deficiencies while enrolled in the Dental Assisting Program.

2. Health
   a. Applicant must present evidence of physical fitness. Lab, x-rays, 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 $950. 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, (310) 860-2451, extension 2550.
   2. Return completed application to the Health Occupations Division, 11110 Alondra Blvd., Norwalk, California 90650.

CERTIFICATE OF ACHIEVEMENT

FIRST SEMESTER

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>DA 51</td>
<td>Applied Dental Science I</td>
<td>4</td>
</tr>
<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>
</tr>
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<td></td>
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<td>13</td>
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SECOND SEMESTER

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>DA 61</td>
<td>Applied Dental Science II</td>
<td>3</td>
</tr>
<tr>
<td>DA 62</td>
<td>Dental Radiography II</td>
<td>2</td>
</tr>
<tr>
<td>DA 63</td>
<td>Advanced Chairside Assisting-</td>
<td>4</td>
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<tr>
<td></td>
<td>Dental Schools</td>
<td></td>
</tr>
<tr>
<td>DA 64</td>
<td>Dental Office Management</td>
<td>2</td>
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<tr>
<td>DA 65</td>
<td>Clinical I Dental Schools</td>
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SUMMER SESSION

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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>DA 75</td>
<td>Clinical II Cooperative Office Training</td>
<td>5</td>
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</table>

TOTAL CERTIFICATE REQUIREMENTS

32

To earn a Certificate of Achievement, a student must (a) verify typing proficiency by taking a college typing or computer course with a “C” or better grade or receive a “B” or better in a high school typing or computer course, (b) achieve a satisfactory score in English on the College Placement Test or clear deficiencies, and (c) submit evidence of a current Basic Life Support CPR Certificate to the Dental Assisting Counselor.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet all the requirements as listed for a Certificate of Achievement in Dental Assisting. For an A.A. Degree, a student must also take electives and General Education to achieve a minimum of 60 units. Recommended electives for students interested in Dental Hygiene Program: CHEM 100 MICRO 200 A&P 200,201, HO 152

DENTAL HYGIENE

A 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 six-week summer session and one six-week optional 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 dental hygienist may work in such practice settings as: private
dentof, state or federal convictions, misdemeanor or felony, associated with state or federal convictions or pleas of nolo contendere even if charges are dismissed. In addition, the application requires specific information related to controlled substances, infectious or contagious diseases and any convictions or pleas of nolo contendere even if charges are dismissed. In addition, the application requires specific information related to convictions, misdemeanor or felony, associated with state or federal action. If there is any concern that may prevent licensure after graduation, direct inquiries to the State Board of Dental Examiners, Committee on Auxiliaries, 1428 Howe Avenue, Sacramento, CA 95825.

**DENTAL HYGIENE PROGRAM REQUIREMENTS**

**I. Prerequisites**

A. High School graduation or equivalent.

B. Introductory Chemistry 100, Anatomy and Physiology 200, 201, HO 152 and Microbiology 200 or equivalent with a grade of "C" or higher. The acceptance of college work previously completed is at the discretion of Cerritos College and the Dental Hygiene Department. Factors such as elapsed time since the course was completed and grades will be used in determining whether a previously completed course can be accepted towards fulfillment of the graduation requirement. Five years is usually considered maximum elapsed time.

C. A valid adult, child, and infant CPR card including two person CPR is required prior to enrolling in the Dental Hygiene classes and must be kept current. CPR courses approved by the state board are given through the American Heart Association and the American Red Cross.

**II. Required Tests and Information**

A. Cerritos College Assessment Tests Battery
   1. Receive satisfactory scores on the Cerritos College Assessment Tests Battery or achieve clearance by taking the appropriate college courses. A 12th grade reading level is required for admission into the program.

B. Allied Health Professions Admission Test
   1. This test is designed to measure general academic ability and scientific knowledge. The test is given regularly each year at established testing centers. Results must be sent to Cerritos College. A test date must be reserved early enough that test results will be received by the application deadline of April 1.
   2. Direct all correspondence and requests for information concerning this test to: Allied Health Professions Admission Test, The Psychological Corporation, 555 Academic Court, San Antonio, Texas 78204 or call (210) 299-1061 or (800) 622-3231.

C. 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 DH Application. To complete this procedure, the student must have a student copy of all transcripts from previously attended colleges.

D. Transcripts
   1. Send one (1) copy of high school transcript to the Admissions and Records Office.
   2. If college work has been completed at Cerritos College, request one (1) official copy of your transcript from the Admissions and Records Office to be sent to the Health Occupations Division Office. Also obtain one (1) copy of current work-in-progress.
   3. If applicant is transferring from another college, request three (3) copies of transcripts: one (1) official copy to be sent to the Health Occupations Division, one (1) official copy to the Admissions and Records Office, and one (1) student copy of your transcript to be used during the counseling session. Request two (2) copies of your current work-in-progress: one (1) to be sent to the Health Occupations Division Office, and one (1) to be used during the counseling session.

E. Application forms
   Along with the Dental Hygiene application, the applicant must complete a Cerritos College application. This form can be obtained from the Admissions and Records Office.

F. 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. 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 and registration, official college transcripts, work-in-progress, and Allied Health Professions Admission Test Scores must be in our possession by April 1.
   2. Criteria for selection will be based on the following:
      a. Allied Health Professions Admission Test Scores
      b. GPA in pre-requisites
      c. Overall GPA for all college courses
      d. Additional biological sciences
      e. Related work experience
   3. Selection will be based upon academic evaluation, test scores and data obtained from the application forms. Candidates will be notified by mail during the month of May.

B. Health Forms
   Present evidence of physical fitness is necessary to succeed in the program. Immunizations and TB testing are required for UCLA School of Dentistry and other extended facilities prior to patient care. Health and immunization forms will be issued to those applicants who are accepted in the program. Dental health professionals may be exposed to contagious diseases therefore strict compliance with CDC and OSHA standards are maintained. Policies on blood borne and infectious diseases are available upon request from the Dental Hygiene Department.
IV. Expenses
A. See Cerritos College catalog for enrollment and out-of-state resident fees.
B. The student may expect to spend approximately $3500 for books and instruments, $250 for uniforms, and another $2000 for miscellaneous fees and immunizations. Membership in the Associated Students of Cerritos College is recommended. Students will be encouraged to join the Student American Dental Hygienists' Association (SADHA) with membership fee of about $45 annually.

V. Scholarship, Attendance, Promotion, Graduation
A. Attendance: all students are required to observe the attendance requirements of the college. During the program, some of the classes are held at UCLA Dental School and various county dental health facilities. Please Note: UCLA clinic class schedule may vary from the Cerritos College class schedule. Some classes may be scheduled in the evenings or on Saturdays.
B. Scholarship and Promotion: Students are required to maintain a grade of "C" or better in each dental hygiene and dental education course in order to progress in the program. 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 California State Board and the National Board Examinations in Dental Hygiene.

DENTAL HYGIENE— 951

ASSOCIATE IN ARTS DEGREE
Prerequisites: CHEM 100, A&P 200, 201, MICR 200, HO 152, or equivalent with a grade of Credit or "C" or higher in each course. Valid adult, child, and infant CPR card including two person CPR.

MAJOR REQUIREMENTS
FIRST YEAR--UNITS

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>DH 110</td>
<td>Preventive Dentistry I</td>
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<td>DH 111</td>
<td>Infection Control &amp; Dental Office Emergencies</td>
<td>2</td>
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<tr>
<td>DH 112</td>
<td>Dental Hygiene Radiography</td>
<td>2</td>
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<tr>
<td>DH 114</td>
<td>Dental Hygiene Clinical Sciences I</td>
<td>2</td>
</tr>
<tr>
<td>DH 115C</td>
<td>Pre-Clinical Dental Hygiene I</td>
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</tr>
<tr>
<td>DH 116</td>
<td>Head &amp; Neck Anatomy</td>
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<tr>
<td>DH 119</td>
<td>Dental Embryology, Histology and Anatomy</td>
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Second Semester

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<tr>
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<td>Preventive Dentistry</td>
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<tr>
<td>DH 125</td>
<td>Dental Hygiene Clinical Sciences II</td>
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<tr>
<td>DH 125C</td>
<td>Clinical Dental Hygiene II</td>
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</tr>
<tr>
<td>DH 126</td>
<td>General &amp; Oral Pathology</td>
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</tr>
<tr>
<td>DH 127</td>
<td>Pharmacology</td>
<td>2</td>
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<tr>
<td>DH 128</td>
<td>Management of Pain</td>
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<td>DH 129</td>
<td>Applied Periodontics</td>
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SUMMER SESSION

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<tbody>
<tr>
<td>DH 150L</td>
<td>Clinical Dental Hygiene IIA</td>
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SECOND YEAR

First Semester

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<tbody>
<tr>
<td>DH 232</td>
<td>Dental Materials Laboratory</td>
<td>1</td>
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<tr>
<td>DH 234</td>
<td>Dental Care for the Special Patient</td>
<td>2</td>
</tr>
<tr>
<td>DH 235</td>
<td>Dental Hygiene Clinical Sciences III</td>
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<tr>
<td>DH 235C</td>
<td>Clinical Dental Hygiene III</td>
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<tr>
<td>DH 238L</td>
<td>Community Dental Health Laboratory I</td>
<td>1</td>
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<tr>
<td>DH 239</td>
<td>Dental Health Education &amp; Research I</td>
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Second Semester

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<tbody>
<tr>
<td>DH 244</td>
<td>Ethical Issues in Dental Hygiene</td>
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<tr>
<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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<tr>
<td>DH 248L</td>
<td>Community Dental Health Laboratory II</td>
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<tr>
<td>DH 249</td>
<td>Dental Health Education &amp; Research II</td>
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SUMMER SESSION - OPTIONAL

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<tr>
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<tr>
<td>DH 250L</td>
<td>Clinical Dental Hygiene V</td>
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</table>

The following requirements also must be completed to qualify for the A.A. Degree:
- General Introductory Psychology (PSYC 101)
- Freshman Composition (ENGL 100)
- Speech (SPCH 100, 130, 132, or 120)
- American Political Institutions (POL 101 or 201)
- Introductory Sociology Principles (SOC 101)
- History (HIST 101, 201, 202, 220 or 221)
- *Humanities (three units)
- *Fine Arts (three units)

*See Cerritos College General Education Requirements for the appropriate lists of courses acceptable for meeting the Humanities and Fine Arts Requirements.

DENTAL HYGIENE— 690

TRANSFER PROGRAM

University of Southern California
60 Semester units must be completed prior to admission with the following courses as part of the 60 semester units:

<table>
<thead>
<tr>
<th>Course</th>
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<th>Units</th>
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<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
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<tr>
<td>BIOL 201</td>
<td>Principles of Biology</td>
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</tr>
<tr>
<td>OR A&amp;P 200</td>
<td>Human Anatomy</td>
<td>(5)</td>
</tr>
<tr>
<td>OR A&amp;P 201</td>
<td>Human Physiology</td>
<td>(5)</td>
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<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
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<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>5</td>
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<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>
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</tr>
<tr>
<td>ENGL 102</td>
<td>Freshman Composition and Literature</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
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</tr>
<tr>
<td>SOC 101</td>
<td>Introductory Sociology Principles</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 100</td>
<td>Fundamentals of Oral Communication</td>
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</table>
Other transfer institutions in California offering a Dental Hygiene program are University of California - San Francisco, and Loma Linda University. Because entrance requirements differ for specific schools details need to be prepared for these institutions. Students are also advised to consult specific school catalogs.

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

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

DRAFTING TECHNOLOGY PROGRAMS

DRAFTING TECHNOLOGY— 823

CERTIFICATE OF ACHIEVEMENT

Recommended High School Preparation:
One year Algebra, one year of Mechanical Drafting

RECOMMENDED COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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<tr>
<td>DRAF 160</td>
<td>AutoCAD MAP</td>
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<tr>
<td>DRAF 117</td>
<td>Geometrical Dimensioning and Tolerancing</td>
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<tr>
<td>DRAF 133</td>
<td>Sheet Metal Layout &amp; Applications</td>
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<tr>
<td>DRAF 138</td>
<td>Fundamentals of Computer Aided Drafting</td>
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<tr>
<td>DRAF 151</td>
<td>Advanced Applications of Computer Aided Drafting &amp; Design</td>
</tr>
<tr>
<td>DRAF 153</td>
<td>Machine Drawing &amp; Design with AutoCAD</td>
</tr>
<tr>
<td>DRAF 237</td>
<td>Graphical Statics &amp; Strength of Materials-Applications</td>
</tr>
<tr>
<td>DRAF 255</td>
<td>AutoCAD Rendering &amp; Solid Modeling</td>
</tr>
<tr>
<td>DRAF 256</td>
<td>Introduction to AutoCAD Mechanical Desktop</td>
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<td>DRAF 257</td>
<td>Advanced Application of AutoCAD Mechanical Desktop</td>
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<tr>
<td>MFGT 100</td>
<td>Manufacturing Processes</td>
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<tr>
<td>TM 50</td>
<td>Technical Mathematics</td>
</tr>
<tr>
<td>OR MATH 60</td>
<td>Elementary Algebra</td>
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<tr>
<td>MTT 100</td>
<td>Modern Manufacturing Concepts and Techniques</td>
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</table>

TOTAL CERTIFICATE REQUIREMENT: 42.5 (43.5)

MECHANICAL DRAFTING OPTION — 819

Above courses required plus both DRAF 258 and MET 100A

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>DRAF 258</td>
<td>Design &amp; Production Technology</td>
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<tr>
<td>MET 100A</td>
<td>Metallurgy 1</td>
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</table>

TOTAL CERTIFICATE REQUIREMENT: 49.5 (50.5)

DRAFTING AND DESIGN TECHNOLOGY — 820

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the above requirements as listed for the Certificate of Achievement in Mechanical Drafting and Design. A student must also complete electives, and A.A. Degree general education requirements to achieve a minimum of 60 units.

RECOMMENDED ELECTIVES: MFTG 51, BA 117, BA 107

CAREER OPPORTUNITIES: Draftsperson, master layout person, systems draftsperson, junior design and tool designer, and CAD/CAM Designers.

RELATED TRANSFER PROGRAM: Industrial (Engineering) Technology-Manufacturing Option.
See Cerritos College Graduation Requirements.

ECONOMICS— 720

TRANSFER PROGRAM

Lower Division Requirements
For Specific Transfer Institutions

California State University-Dominguez Hills
ECON 201 Principles of Macroeconomics 3
ECON 202 Principles of Microeconomics 3
MATH 112 Elementary Statistics 4

Additional courses required for concentrations.

General Economics Concentration
BUSA 101 Fundamentals of Accounting I 4
AND BUSA 102 Fundamentals of Accounting II 4
OR MATH 190 Analytic Geometry and Calculus II (4)

Quantitative Economics Concentration
CIS 101 Introduction to Computer Information Systems 3
MATH 116 Calculus for Managerial, Biological and Social Sciences 4

California State University-Fullerton
ECON 201 Principles of Macroeconomics 3
ECON 202 Principles of Microeconomics 3
BUSA 101 Fundamentals of Accounting I 4
AND BUSA 133 Spreadsheet Accounting I 3
MATH 116 Calculus for Managerial, Biological & Soc. Sciences 4
OR MATH 170 Analytic Geometry and Calculus I (4)
MATH 190 Analytic Geometry and Calculus II 4
OR BUSA 102 Fundamentals of Accounting II (4)
AND BUSA 133 Spreadsheet Accounting I 3
CIS 101 Introduction to Computer Information Systems 3

California State University-Long Beach
ECON 201 Principles of Macroeconomics 3
ECON 202 Principles of Microeconomics 3
PHIL 106 Introduction to Logic 3
BUSA 101 Fundamentals of Accounting I 4
MATH 114 Finite Math 4
OR MATH 170 Analytic Geometry and Calculus I 4

BUSINESS ECONOMICS

Same requirements as Economics.

California State University-Los Angeles
ECON 201 Principles of Macroeconomics 3
ECON 202 Principles of Microeconomics 3
MATH 112 Elementary Statistics 4

Additional courses required for options.

Option 1: Applied Economics
BUSA 101 Fundamentals of Accounting I 4
AND BUSA 102 Fundamentals of Accounting II 4
CIS 101 Introduction to Computer Information Systems 3
MATH 170 Analytic Geometry and Calculus I 4
Option 2: Social and Behavioral Sciences

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

California Polytechnic University, Pomona

ECON 201 Principles of Macroeconomics 3  
ECON 202 Principles of Microeconomics 3  
BUS 101 Fundamentals of Accounting I 4  
AND BUSA 102 Fundamentals of Accounting II 4  
OR BUSA 101 Fundamentals of Accounting I 4  
AND BUSA 102 Fundamentals of Accounting II 4  
AND BUSA 241 Managerial Accounting 4  
ENGL 102 Freshman Composition and Literature 3  
OR ENGL 103 Critical and Argumentative Writing 3  
ENGL 155 Technical Writing 3  

Additional requirements for students selecting concentration of Track B:

MATH 170 Analytic Geometry and Calculus I 4  
AND MATH 190 Analytic Geometry and Calculus II 4  

University of California, Irvine

ECON 201 Principles of Macroeconomics 3  
AND ECON 202 Principles of Microeconomics 3  
MATH 170 Analytic Geometry and Calculus I 4  
AND MATH 190 Analytic Geometry and Calculus II 4  
CIS 280 Object-Oriented Programming in C++ 3  

Two introductory social science courses in disciplines other than economics is another requirement. An approved list of courses is available on ASSIST. Please see a counselor, if necessary, for help.

University of California, Los Angeles

ECON 201 Principles of Macroeconomics 3  
ECON 202 Principles of Microeconomics 3  
MATH 112 Elementary Statistics 3  
MATH 170 Analytic Geometry and Calculus I 4  
MATH 190 Analytic Geometry and Calculus II 4  
ENGL 102 Freshman Composition and Literature 3  
OR ENGL 103 Critical and Argumentative Writing 3  

ECON 201 Principles of Macroeconomics 3  
ECON 202 Principles of Microeconomics 3  
MATH 112 Elementary Statistics 4  
MATH 170 Analytic Geometry and Calculus I 4  
and MATH 190 Analytic Geometry and Calculus II 4  
ENGL 102 Freshman Composition and Literature 3  
or ENGL 103 Critical and Argumentative Writing 3  
BUSA 101 Fundamentals of Accounting I 4  
and BUSA 102 Fundamentals of Accounting II 4  

University of California, Riverside

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

Business Economics

EDT 1 Windows for Educators 1  
OR EDT 2 Macintosh for Educators 1  

Take one of the following:

EDT 4 Integration of the Internet to the Curriculum – Part 2 1  
EDT 5 Integration of the Internet to the Curriculum - Part 3 1  
EDT 6 E-mail for Educators 1  
EDT 9 PowerPoint for Educators I 1  
EDT 11 Excel Spreadsheets for Educators 1  
EDT 12 Access for Educators 1  
EDT 14 Web Design for Educators 1  
EDT 16 Fundamentals of Online Courses 1  
EDT 104 Word for Educators I 1  

See Cerritos College Graduation Requirements.

EDUCATIONAL TECHNOLOGY PROGRAM

EDUCATIONAL TECHNOLOGY—310 CERTIFICATE OF ACHIEVEMENT

The Educational Technology Certificate focuses on the fundamental computer skills needed to work within today's educational technology environments. The program provides a foundation in computer software and resources for curriculum development and presentations, multi-media enhancements and other general skills and strategies that would be used in a classroom or in a service program that assists teachers to enhance their curriculum delivery.

The goal of the Certificate program is to train educators or potential educators to effectively use technology to improve the learning environments of today's schools and for direct entry into employment in education or education related careers. This certificate can lead to an A.A. degree.

Major Requirements – You must complete 10 units in this area

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDT 1</td>
<td>1</td>
</tr>
<tr>
<td>EDT 2</td>
<td>1</td>
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<tr>
<td>EDT 4</td>
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<td>EDT 5</td>
<td>1</td>
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<td>EDT 6</td>
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<td>EDT 9</td>
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<td>EDT 11</td>
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<tr>
<td>EDT 12</td>
<td>1</td>
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<tr>
<td>EDT 14</td>
<td>1</td>
</tr>
<tr>
<td>EDT 16</td>
<td>1</td>
</tr>
<tr>
<td>EDT 104</td>
<td>1</td>
</tr>
</tbody>
</table>

10
Additional Requirements – You must complete 8 units in this area:
Take one of the following not taken under Major Requirements above:
EDT 1 Windows for Educators 1
OR EDT 2 Macintosh for Educators (1)

Take 7 units from the following:
EDT 8 Word for Educators - Part 2 1
EDT 10 PowerPoint for Educators - Part 2 1
EDT 15 Education Hardware/Software Evaluation 1
EDT 17 Computers Integration in Educators 1
EDT 19 Fundamentals of Teleconferencing 1
EDT 29 Preparation for Online Learning 1
EDT 43 EdTech Occupational Work Experience 3
EDT 64 HyperStudio Basics 1
EDT 65 Advanced HyperStudio 1
EDT 67 Inspiration Presentations 1
EDT 68 Using KidPix 1
EDT 85 Virtual Curriculum 3
ART 196 Introduction to Designing Web Graphics 3
CIS 50 Basic Computer Literacy .5
CIS 121 Introduction to Internet 1.5
PHOT 112 Intermediate Digital Photography 3

Total amount needed: 18 units

To be awarded a Certificate of Achievement by the college, a student must complete all the major requirements and 8 additional EDT units to total a minimum of 18 units.

Certificate of Completion awarded by the EDT department may be given after 9 EDT units.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete all the major requirements for the Certificate of Achievement and all A.A. degree general education requirements for a total of at least 60 units.

INSTRUCTIONAL MULTI-MEDIA — 320

CERTIFICATE OF ACHIEVEMENT

The Instructional Multi-Media Certificate focuses on the fundamental multi-media skills needed to work within today's educational technology environments. The program provides a foundation in computer software and resources for curriculum development and presentations, multi-media enhancements, audio and video skills along with strategies that would be used in a classroom or in a service program that assists teachers to enhance their curriculum delivery.

The goal of the Certificate program is to train educators or potential educators to effectively use technology to improve the learning environments of today's schools and for direct entry into employment in education or education related careers. This certificate can lead to an A.A. degree.

Major Requirements – You must complete 10 units in this area

Take one of the following:
EDT 1 Windows for Educators 1
OR EDT 2 Macintosh for Educators (1)

Take all of the following:
EDT 9 PowerPoint for Educators I 1
EDT 10 PowerPoint for Educators - Part 2 1
EDT 14 Web Design for Educators 1
EDT 15 Education Hardware/Software Evaluation 1
EDT 16 Fundamentals of Online Courses 1
EDT 18 Desktop Publishing for Educators 1
EDT 19 Fundamentals of Teleconferencing 1
EDT 100 Integration of the Internet to the Curriculum – Part I 1

Total amount needed: 18 units

To be awarded a Certificate of Achievement by the college, a student must complete all the major requirements and 8 additional EDT units to total a minimum of 18 units.

Certificate of Completion awarded by the EDT department may be given after 9 EDT units.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete all the major requirements for the Certificate of Achievement and all A.A. degree general education requirements for a total of at least 60 units.

TELECONFERENCING PRACTITIONER — 330

CERTIFICATE OF ACHIEVEMENT

The Teleconferencing Practitioner Certificate focuses on the fundamental teleconferencing skills needed to work within today's educational technology environments. The program provides a foundation in teleconferencing strategies that would be used in a teleconference center or classroom or in a service program that assists teachers to enhance their teleconferencing delivery.

The goal of the Certificate program is to train educators or potential educators to effectively use teleconferencing technology and strategies to improve the learning environments of today's schools and/or for direct entry into employment in education or education related careers. This certificate can lead to an A.A. degree.


**Curricula, Requirements for Majors, Certificates and Transfer Programs**

**Major Requirements** - You must complete 13 units in this area.

**UNITS**

- Take one of the following:
  - EDT 1 Windows for Educators 1
  - OR EDT 2 Macintosh for Educators 1

**Take all of the following:**

- EDT 15 Education Hardware/Software Evaluation 1
- EDT 19 Fundamentals of Teleconferencing 1
- EDT 20 Teleconferencing for Small Groups 2
- EDT 21 Teleconference Telematics 1
- EDT 22 Teleconference Review and Evaluation 1
- EDT 23 Teleconference Production 3
- EDT 24 Teleconference Portfolio 3

13

**Additional Requirements**

You must complete 5 units in this area.

- Take one of the following not taken under major requirements above:
  - EDT 1 Windows for Educators 1
  - OR EDT 2 Macintosh for Educators 1

EDT 4 Integration of the Internet to the Curriculum - Part 2 1
EDT 5 Integration of the Internet to the Curriculum - Part 3 1
EDT 8 Word for Educators II 1
EDT 9 PowerPoint for Educators I 1
EDT 10 PowerPoint for Educators - Part 2 1
EDT 14 Web Design for Educators 1
EDT 16 Fundamentals of Online Courses 1
EDT 17 Computers Integration in Educators 1
EDT 43 EdTech Occupational Work Experience 3
EDT 85 Virtual Curriculum 3
ART 196 Introduction to Designing Web Graphics 3
CIS 50 Basic Computer Literacy 5
PHOT 112 Intermediate Digital Photography 3

Total amount needed: 18 units.

To be awarded a Certificate of Achievement by the college, a student must complete all the major requirements and 5 additional EDT units to total a minimum of 18 units.

Certificate of Completion awarded by the EDT department may be given after 9 EDT units.

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

Complete the above BASIC CORE requirements (32 units), the above corequisites (8 units), the A.A. Degree general education requirements, and electives as needed to complete the 60 units.

An A.A. with a specialization is available by including 12 additional units from the Certificate of Achievement options.

**CAREER OPPORTUNITIES:** Opportunities for electronic technicians include the aerospace, automotive, transportation, computer, instrumentation, telecommunication, television broadcasting, entertainment, motion picture, process control, manufacturing and health care industries and government agencies.

**RELATED TRANSFER PROGRAM:** Industrial Technology-Electronics—836, Industrial Technology-Automated Manufacturing—839.

**ELECTRONICS TECHNOLOGY—830**

**ASSOCIATE IN ARTS DEGREE**

**ELECTRONICS PROGRAM BASIC CORE COURSES**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL 50</td>
<td>Electronic Tests and Measurements</td>
<td>1.5</td>
</tr>
<tr>
<td>EL 60</td>
<td>Computer Aided Circuit Analysis</td>
<td>1.5</td>
</tr>
<tr>
<td>EL 110</td>
<td>Principles of DC Electronics</td>
<td>4</td>
</tr>
<tr>
<td>EL 110L</td>
<td>DC Electronics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>EL 134</td>
<td>Digital Circuits and Computer Logic</td>
<td>3</td>
</tr>
<tr>
<td>Or EL 114</td>
<td>Fundamentals of Digital Electronics</td>
<td>3</td>
</tr>
<tr>
<td>And EL 124</td>
<td>Advanced Digital Electronics</td>
<td>3</td>
</tr>
<tr>
<td>EL 134L</td>
<td>Digital Circuits and Computer Logic Lab</td>
<td>1</td>
</tr>
<tr>
<td>Or EL 114L</td>
<td>Fundamentals of Digital Electronics Lab</td>
<td>1</td>
</tr>
<tr>
<td>And EL 124L</td>
<td>Advanced Digital Electronics Lab</td>
<td>1</td>
</tr>
<tr>
<td>EL 120</td>
<td>Principles of AC Electronics</td>
<td>4</td>
</tr>
<tr>
<td>EL 120L</td>
<td>AC Electronics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>EL 200</td>
<td>Semiconductor Electronics</td>
<td>3</td>
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<tr>
<td>EL 200L</td>
<td>Semiconductor Electronics</td>
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<tr>
<td>EL 210</td>
<td>Electronics Systems Analysis</td>
<td>3</td>
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<tr>
<td>EL 210L</td>
<td>Electronics Systems Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**

25(29)

**CORREQUISITES IN MATHEMATICS**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>TM 50</td>
<td>Technical Mathematics</td>
</tr>
<tr>
<td>Or MATH 140</td>
<td>Trigonometry</td>
</tr>
</tbody>
</table>

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

Complete 60 units to include (1) the above BASIC CORE requirements (32 units), (2) the above corequisites (8 units), (3) the A.A. Degree general education requirements, and (4) electives as needed to complete the 60 units.

**RELATIONSHIP TO TRANSFER PROGRAM:**

Certificates of Achievement in Electronics are available under five options. All options require completion of the Electronics Basic Core and Corequisite Mathematics courses. With Department approval, option courses may be tailored to student occupational objectives. Such options require a minimum of 12 units.

**INDUSTRIAL ELECTRONICS TECHNOLOGY**
**OPTION—816**
- EL 56 Programmable Logic Controllers 3.5
- EL 66 Fundamentals of Electricity 3
- EL 76 Industrial Electronic Control 3.5
- EL 86 Electric Motor Control 3

TOTAL UNITS 13(45)

**COMMUNICATIONS TECHNOLOGY**
**OPTION—822**
- EL 202 Radio and TV Theory and Servicing 3
- EL 210 Electronic Systems Analysis 3
- EL 210L Electronic Systems Analysis Lab 1
- EL 212 Electronics Communications 3
- EL 212L Electronics Communications Lab 1

And three (3) units selected from the following courses:
- EL 64A Introduction to Telecommunications Electronics 3
- EL 64B Advanced Telecommunications Electronics 3
- EL 94 Introduction to Digital Signal Processing 3
- EL 220 Linear Integrated Circuits 3
- EL 220L Linear Integrated Circuits Lab 1

TOTAL UNITS 14 (46)

**COMPUTER SERVICING TECHNOLOGY**
**OPTION—827**
- EL 54 Microcomputer Repair Fundamentals 3
- EL 244 Introduction to Microcomputers 4

And six (6) units selected from the following courses:
- EL 53A Introduction to Microprocessors 3
- EL 53B Advanced Microprocessors 2
- EL 94 Introduction to Digital Signal Processing 3
- CIS 56 Microcomputer Disk Operating Systems 3
- CIS 70A Networking Fundamentals 2.5

TOTAL UNITS 13(45)

**BIO-MEDICAL INSTRUMENTATION**
**OPTION—831**
- EL 205 Bio-Medical Electronics 4
- EL 210 Electronic Circuit Analysis 3
- EL 210L Electronic Circuit Analysis Lab 1
- EL 215 Bio-Medical Instruments 4
- A&P 120 Intro to Human Anatomy & Physiology 4
- OR A&P 130 Human Anatomy and Physiology (5)

TOTAL UNITS 16 (48)

**TELECOMMUNICATIONS TECHNOLOGY**
**OPTION—826**
- EL 62 Optoelectronics 3
- EL 64A Introduction to Telecommunications Electronics 3
- EL 64B Advanced Telecommunications Electronics 3
- EL 94 Digital Signal Processing 3.5
- EL 212 Electronic Communication 3

TOTAL UNITS 15.5(48.5)

CAREER OPPORTUNITIES: Opportunities for electronic technicians include the aerospace, automotive, transportation, computer, instrumentation, telecommunication, television broadcasting, entertainment, motion picture, process control, manufacturing and health care industries and government agencies.

RELATED TRANSFER PROGRAM:
Industrial Technology Electronics—836, and Industrial Technology--Automated Manufacturing—839.

See Cerritos College Graduation Requirements.

**ENGINEERING—615**
**TRANSFER PROGRAM**

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

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
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</tr>
<tr>
<td>ENGR 112</td>
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<td>MATH 170</td>
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<tr>
<td>MATH 190</td>
<td>4</td>
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<tr>
<td>MATH 220</td>
<td>4</td>
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<tr>
<td>PHYS 201</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>4</td>
</tr>
</tbody>
</table>

**ADD THIS CLASS FOR THE UNIVERSITY OF CALIFORNIA**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 240</td>
<td>4</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.

<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>
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</tr>
<tr>
<td>CHEM 112</td>
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<td>CIS 177</td>
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<td>CIS 292</td>
<td>4</td>
</tr>
<tr>
<td>DRAF 138</td>
<td>4</td>
</tr>
<tr>
<td>EL 114</td>
<td>3</td>
</tr>
</tbody>
</table>
EL 114L  Fundamentals of Digital Electronics Lab  1
ENGR 123  Descriptive Geometry  3
ENGR 215  Engineering Electric Circuits  3
ENGR 235  Statics  3
MATH 240  Calculus and Differential Equations  4
MFGT 100  Manufacturing Processes  3
PHYS 203  Engineering Physics  4

California State University - Long Beach
(CSULB) Offers nine engineering disciplines providing opportunity for specialization in the areas of Biomedical, Chemical, Civil, Computers, Electrical, Industrial-Management, Materials, Mechanical, and Ocean Engineering.

California State University - Fullerton
(CSU) Has a common core of courses for the first two and one-half years. During the last two years the student selects engineering courses appropriate to one of the three options available: Electrical, Civil, and Mechanical.

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

California State University - Pomona
(CSUP) Engineering school departments: Aerospace, Chemical and Materials, Civil, Electrical and Computer, Engineering Technology, Industrial and Manufacturing, and Mechanical. This institution combines technical applied courses with the sciences throughout the entire program.

Due to the fact that many of technical courses required cannot be duplicated at the community college level, it is wise to plan on attending Cal Poly during the summer quarter following graduation from Cerritos.

University of California - Los Angeles
(UCLA) Offers Bachelor's Degree in the following: Aerospace, Chemical, Civil, Computer Science, Computer Science and Engineering, Electrical, Materials, and Mechanical.

University of California - Irvine
(UCI) Offers Bachelor's Degree in the following: Aerospace, Chemical, Civil, and Computer Engineering, Electrical, Environmental, and mechanical.

University of California - Riverside
(UCR) Offers Bachelor's Degree in the following: Chemical, Computer, Electrical, Environmental, and Mechanical.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
The following minimum requirements must be met in order to receive the Associate in Arts Degree: CIS 178 or CIS 177, CHEM 111, MATH 170,190,220, PHYS 201,202, together with Cerritos College AA DEGREE GENERAL EDUCATION REQUIREMENTS TO TOTAL 60 UNITS.

CAREER OPPORTUNITIES: Career opportunities in engineering vary widely depending upon the area of specialization. The Cerritos Career Center provides current and comprehensive career information concerning each engineering discipline. Because engineering is a high unit professional major, the schools of engineering may require special general education classes. Contact a Cerritos engineering counselor for specific information.

ENGLISH— 530
TRANSFER PROGRAM
COMMON LOWER DIVISION PREPARATION
FOR THE CALIFORNIA STATE UNIVERSITY
AND CALIFORNIA STATE UNIVERSITY Units
ENGL 100  Freshman Composition  3
ENGL 102  Freshman Composition  3
ENGL 103  Critical and Argumentative Writing  3
ENGL 246A  Survey of English Literature  3
ENGL 246B  Survey of English Literature  3

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

LOWER DIVISION MAJOR REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS
California State University - Fullerton:
Six units selected from the following courses:
ENGL 230B  Introduction to American Literature  3
ENGL 246A  Survey of English Literature  3
ENGL 246B  Survey of English Literature  3
Or ENGL 230A  Introduction to American Literature  3

California State University - Long Beach
ENGL 246A  Survey of English Literature  3
ENGL 246B  Survey of English Literature  3
(ENGL 240, Creative Writing is required of students planning to choose the creative writing option at CSULB.)

University of California - Los Angeles
ENGL 246A  Survey of English Literature  3
ENGL 246B  Survey of English Literature  3
Select one course from the following:
ENGL 232  Reading in Poetry  3
ENGL 233  Readings in the Novel  3
ENGL 234  Readings in Short Fiction  3
ENGL 235  Readings in the Drama  3

University of California - Irvine
Complete one (1) year of Intermediate College Level Foreign Language. Select from the following:
FRENCH, GERMAN, JAPANESE or SPANISH.

University of California - Los Angeles
Complete 202 of Intermediate College Level Foreign Language. Select from the following:
FRENCH, GERMAN, JAPANESE or SPANISH or Course 102 of one Foreign Language.
AND select two (2) courses from the following:
ENGL 221A  Literature in Bible-Hebrew Scriptures  3
ENGL 221B  Literature in Bible-Christian Scripture  3
ENGL 225  Mexican Literature in Translation  3

University of California - Riverside
ENGL 230A  Introduction to American Literature  3
ENGL 230B  Introduction to American Literature  3
Recommended one course from the following:

- ENGL 248A Masterpieces of World Literature 3
- ENGL 248B Masterpieces of World Literature 3

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

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete 60 units to include:
1. ENGL 100, ENGL 102 or ENGL 103
3. the Associate in Arts Degree general education requirements.

CAREER OPPORTUNITIES: English graduates are employed in all sectors of the economy requiring analytical and communication skills; opportunities in the broad fields of government, transportation, business management, publications, communications, and the media; positions in education, public relations, advertising, libraries, museums, excellent preparation for study of law, theology, library, science.

FOODSERVICE MANAGEMENT — 953
CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS:

<table>
<thead>
<tr>
<th>UNITS</th>
<th>COURSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>BA 50 Business Mathematics</td>
</tr>
<tr>
<td>3</td>
<td>OR MATH 20 Basic Mathematics (3)</td>
</tr>
<tr>
<td>3</td>
<td>BA 107 Human Relations in Business</td>
</tr>
<tr>
<td>3</td>
<td>BA 114 Marketing</td>
</tr>
<tr>
<td>3</td>
<td>BA 117 Introduction to Supervision</td>
</tr>
<tr>
<td>9.5</td>
<td>CA 52 Food Production</td>
</tr>
<tr>
<td>3</td>
<td>CA 60 Foods Purchase and Control</td>
</tr>
<tr>
<td>4</td>
<td>CA 80 Introduction to Baking Skills</td>
</tr>
<tr>
<td>5</td>
<td>CA 81 Professional Baking/Pastry Production I</td>
</tr>
<tr>
<td>2</td>
<td>CA 101 Introduction to Foodservice &amp; Sanitation</td>
</tr>
<tr>
<td>3</td>
<td>CA 120 Introduction to Hospitality</td>
</tr>
<tr>
<td>2</td>
<td>HO 151 Elements of Nutrition</td>
</tr>
<tr>
<td>40.5</td>
<td>TOTAL CERTIFICATE REQUIREMENTS:</td>
</tr>
</tbody>
</table>

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet all the requirements as listed for Certificate of Achievement in Foodservice Management and complete general education requirements and electives to achieve a minimum of 60 units. Recommended electives: BCOT 114, BA 111.

FORESTRY — 670
TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION

<table>
<thead>
<tr>
<th>UNITS</th>
<th>COURSE</th>
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<tbody>
<tr>
<td>5-5</td>
<td>BIOL 200-201 Principles of Biology</td>
</tr>
<tr>
<td>3</td>
<td>MATH 112 Mathematical Statistics</td>
</tr>
<tr>
<td>3</td>
<td>CIS 178 Digital Computer Prog.</td>
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LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University Humboldt:

<table>
<thead>
<tr>
<th>COURSE</th>
</tr>
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<tbody>
<tr>
<td>MATH 116 Calculus for Managerial, Biological and Social Sciences</td>
</tr>
<tr>
<td>CHEM 110 Elementary Chemistry</td>
</tr>
<tr>
<td>OR CHEM 111 General Chemistry (5)</td>
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<td>ORNH 110 Soils</td>
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California State University Berkeley:

<table>
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<th>COURSE</th>
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<tbody>
<tr>
<td>ECON 201 Principles</td>
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<tr>
<td>ECON 202 Principles</td>
</tr>
<tr>
<td>ENGL 102 Freshman Composition and Literature</td>
</tr>
<tr>
<td>GEOL 101 The Earth Environment</td>
</tr>
<tr>
<td>MATH 170 Analytic Geometry and Calculus I</td>
</tr>
<tr>
<td>CHEM 111-112 General Chemistry 5-5</td>
</tr>
</tbody>
</table>

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete the above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all A.A. degree general education requirements for a total of at least 60 units.

CAREER OPPORTUNITIES: After transfer to a four-year college or university and completion of the Bachelor’s Degree Program, graduates qualify for graduate study and for employment with timber companies, utility companies, U.S. Forest Service, National Park Service, Bureau of Land Management, Environmental Protection Agency, and the California Division of Forestry.

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

FRENCH — 551
TRANSFER PROGRAM

California State University, Fullerton

<table>
<thead>
<tr>
<th>COURSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 101 Elementary French</td>
</tr>
<tr>
<td>FREN 102 Elementary French</td>
</tr>
<tr>
<td>FREN 201 Intermediate French</td>
</tr>
<tr>
<td>FREN 202 Intermediate French</td>
</tr>
<tr>
<td>FREN 203 Intermediate French, Advanced Level I</td>
</tr>
</tbody>
</table>

California State University, Long Beach

<table>
<thead>
<tr>
<th>COURSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 101 Elementary French</td>
</tr>
<tr>
<td>FREN 102 Elementary French</td>
</tr>
<tr>
<td>FREN 281 Beginning Conversation French</td>
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California State University, Los Angeles

<table>
<thead>
<tr>
<th>COURSE</th>
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</thead>
<tbody>
<tr>
<td>FREN 101 Elementary French</td>
</tr>
<tr>
<td>FREN 102 Elementary French</td>
</tr>
<tr>
<td>AND FREN 202 Intermediate French</td>
</tr>
<tr>
<td>FREN 281 Beginning Conversation French</td>
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</tbody>
</table>

University of California, Irvine

<table>
<thead>
<tr>
<th>COURSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 101 Elementary French</td>
</tr>
<tr>
<td>AND FREN 102 Elementary French</td>
</tr>
<tr>
<td>FREN 201 Intermediate French</td>
</tr>
<tr>
<td>AND FREN 202 Intermediate French</td>
</tr>
</tbody>
</table>

At least one course is required from four different areas (writing, literature, history, and philosophy). An approved list of courses is available from ASSIST. Please consult a counselor, if necessary, for these additional classes.
University of California, Riverside
Intermediate level competency in French (level determined by placement test at UCR).

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

CAREER OPPORTUNITIES: Employment with the government,
international firms, airline hostess, travel agent, librarian, linguistic
reporter, teacher interpreter, translator.

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

GENERAL STUDIES—001
ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
The GENERAL STUDIES major allows students to explore various
academic disciplines within the college curriculum. In addition
to meeting the Associate in Arts general education and proficiency
requirements, students choosing this major can freely select those
courses which meet their personal and occupational needs or interest.

In order to qualify for an Associate in Arts Degree in GENERAL
STUDIES, the following requirements must be met:

COMPLETE A MINIMUM OF 60 UNITS TO INCLUDE:
1. The general education pattern of courses and proficiency
   requirements. See A.A. graduation requirements page.
2. Additional units of course work to fulfill the 60 unit mini-
   mum may be selected from categories a., b., c., d.,
   and/or from any of the other degree applicable courses the
   college offers.
3. Consultation with a counselor prior to completing the final
   18 units of course work.

See Cerritos College Graduation Requirements.

GEOGRAPHY—730
TRANSFER PROGRAM
COMMON LOWER DIVISION PREPARATION
FOR THE CALIFORNIA STATE UNIVERSITY
CHEM 111 General Chemistry 5
CHEM 112 General Chemistry 5
GEOL 101 The Earth Environment 4
MATH 170 Analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4

ADDITIONAL LOWER DIVISION MAJOR REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS
California State University - Dominguez Hills
GEOL 201 Earth History 4
PHYS 101 General Physics 4
AND PHYS 102 General Physics 4
OR PHYS 201 Engineering Physics (4)
AND PHYS 202 Engineering Physics 4
MATH 170 Analytic Geometry and Calculus I 4
AND MATH 190 Analytic Geometry and Calculus II 4
OR MATH 116 Calculus for Managerial, Biological and Social
Sciences (4)
AND MATH 112 Elementary Statistics 4

California State University - Fullerton
Biol 120 Introduction to Biological Science 4
OR BIOL 200 Principles of Biology (5)
AND BIOL 201 Principles of Biology 5
CIS 102 Introduction to Microcomputers
using Microsoft Office 3
OR CIS 177 Programming in Pascal (3)
OR CIS 178 Programming in Fortran (3)
GEOL 201 Earth History 4
PHYS 201 Engineering Physics 4
PHYS 202 Engineering Physics 4
OR PHYS 203 Engineering Physics (4)
AND PHYS 101 General Physics (4)
AND PHYS 102 General Physics 4
See counselor for further details.

California State University - Long Beach
Biol 120 Introduction to Biological Science 4
GEOL 201 Earth History 4
PHYS 201 Engineering Physics 4
PHYS 202 Engineering Physics 4

*Consult Counselor for additional required courses for other
emphases.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete the above common lower division requirements plus
other courses selected in consultation with a counselor to provide for
the 18 unit minimum and all A.A. degree general education require-
ments for a total of at least 60 units.

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

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

California State University - Los Angeles

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 201</td>
<td>Earth History</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>
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</table>

California State University Polytechnic - Pomona

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 201</td>
<td>Earth History</td>
<td>4</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics</td>
<td>4</td>
</tr>
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</table>

University of California - Los Angeles

<table>
<thead>
<tr>
<th>Course</th>
<th>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>ESCI 110</td>
<td>Introduction to Earth Science</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

RECOMMENDED: One (1), Introductory course in computer programming.

University of California - Irvine

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 101</td>
<td>Elementary German</td>
<td>5</td>
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<tr>
<td>GERM 102</td>
<td>Elementary German</td>
<td>5</td>
</tr>
<tr>
<td>GERM 201</td>
<td>Intermediate German</td>
<td>4</td>
</tr>
<tr>
<td>GERM 202</td>
<td>Intermediate German</td>
<td>4</td>
</tr>
</tbody>
</table>

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 ASSIST. Please consult a counselor, if necessary, for these additional classes.

University of California, Riverside

Intermediate level proficiency in the German language (level determined by placement test at UCR).

Language Option Add:

Intermediate level proficiency in a language other than German.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

(1) Meet the above requirements as listed for a state university,
(2) complete the A.A. Degree general education requirements, and (3) take electives to achieve the minimum of 60 units.

CAREER OPPORTUNITIES: Employment with U.S. or international agencies or with international business firms, airline hostess, travel agency personnel, librarian, linguistic reporter, teacher, interpreter, translator.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete 60 units to include (1) the above required courses and (2) the Associate in Arts degree general education requirements.

CAREER OPPORTUNITIES: After transfer to a four-year college or university and completion of the Bachelor's Degree program, graduates qualify for graduate study and for professional careers in government or industry and teaching.

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

HISTORY— 740

TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION

FOR THE CALIFORNIA STATE UNIVERSITY

AND UNIVERSITY OF CALIFORNIA

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 201</td>
<td>Political &amp; Social History of the U.S.</td>
<td>3</td>
</tr>
<tr>
<td>HIST 202</td>
<td>Political &amp; Social History of the U.S.</td>
<td>3</td>
</tr>
<tr>
<td>HIST 241</td>
<td>Western Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HIST 242</td>
<td>Western Civilization</td>
<td>3</td>
</tr>
</tbody>
</table>

ADDITIONAL LOWER DIVISION REQUIREMENTS

FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Dominguez Hills

HIST 201 and 202 are not required.

Foreign Language: Students intending graduate work in History are advised to study at least one foreign language appropriate to area of specialization.
### University of California - Irvine

- **HIST 260** Survey of the History of Asia 3
- **HIST 265** Selected Problems in Contemporary Asian History 3

Up to (3) three additional UC transferable history courses.

Two years of a language other than English, FREN 201 & 202, GERM 201 & 202, JAPN 201 & 202 or SPAN 201 & 202.

### University of California - Riverside

Any UC transferable lower division History, regardless of whether it is articulated to a particular UCR course.

### University of California - Los Angeles

- **HIST 241** Western Civilization 3
- **OR HIST 242** Western Civilization 3
  - Two (2) courses from
- **HIST 250** History of England, Great Britain and the Commonwealth 3
- **HIST 220** History of the Americas 3
- **HIST 221** History of the Americas 3
- **HIST 260** Survey of the History of Asia 3
- **HIST 265** Selected Problems in Contemporary Asian History 3
- **HIST 255** History of Russia and the Soviet Union 3
- **HIST 101** American History and Constitution 3
- **HIST 230** History of Mexico 3
- **HIST 110** African-American History 3
- **HIST 120** History of California 3

### ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete the above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all AA degree general education requirements for a total of at least 60 units.

**CAREER OPPORTUNITIES:** Teaching, law, government, and other public services.

See Cerritos College Graduation Requirements.

See State University General Education List.

### HOME ECONOMICS—960

**TRANSFER PROGRAM**

CSU, Long Beach offers the Bachelor of Arts degree in Family Consumer Sciences (Formerly Home Economics).

**Options:**
- Child Development and Family Studies
- Communication
- Consumer Affairs
- Fashion Merchandising
- Textiles and Clothing

Each option requires specific courses. Students are urged to see a Cerritos College counselor for accurate and complete lower division preparation.

### LOWER DIVISION MAJOR REQUIRED FOR SPECIFIC TRANSFER INSTITUTION

<table>
<thead>
<tr>
<th>California State University - Long Beach</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A&amp;P 120</strong> Introduction to Human Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td><strong>OR A&amp;P 130</strong> Human Anatomy and Physiology</td>
<td>5</td>
</tr>
<tr>
<td><strong>PSYC 101</strong> General Introductory Psychology</td>
<td>3</td>
</tr>
<tr>
<td><strong>SOC 101</strong> Introductory Sociology Principles</td>
<td>3</td>
</tr>
<tr>
<td><strong>OR ANTH 100</strong> Cultural Anthropology</td>
<td>3</td>
</tr>
</tbody>
</table>

*These must be completed with a "C" or better.*

### Fashion Merchandise Option

- **BUSA 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 240** Western Civilization 3
- **PSYC 101** General Introductory Psychology 3
- **SOC 101** Introductory Sociology Principles 3
- **OR ANTH 100** Cultural Anthropology 3

### 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.

See Cerritos College Graduation Requirements.

See State University General Education List.

### INDUSTRIAL ARTS EDUCATION—890

**TRANSFER PROGRAM**

**COMMON LOWER DIVISION PREPARATION**

<table>
<thead>
<tr>
<th>California State University - Los Angeles</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AUTO 100</strong> Automotive Maintenance and Operation</td>
<td>4</td>
</tr>
<tr>
<td><strong>DRAF 131</strong> Fundamentals of Drafting Including AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td><strong>EL 110</strong> Principles of DC Electronics</td>
<td>3</td>
</tr>
<tr>
<td><strong>EL 110L</strong> DC Electronics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td><strong>PHOT 100</strong> Introductory Photography</td>
<td>3</td>
</tr>
</tbody>
</table>

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.

### ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete 60 units to include (1) the above required courses, (2) 4 units of Technology/CSU transfer electives, and (3) the Associate in Arts Degree requirements.

**CAREER OPPORTUNITIES:** After transfer, completion of the Bachelor's Degree Program and receiving a Teaching Credential, graduates are prepared for teaching positions in Industrial Education through High School.

See Cerritos College Graduation Requirements.

See State University General Education List.
INDUSTRIAL TECHNOLOGY — CONSTRUCTION
OPTION — 837
TRANSFER PROGRAM
COMMON LOWER DIVISION PREPARATION
FOR THE CALIFORNIA STATE UNIVERSITY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>ARCH 111</td>
<td>Architectural Drafting</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>DRAF 131</td>
<td>Fundamentals of Drafting Including AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Principles</td>
<td>3</td>
</tr>
<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</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>PHYS 103</td>
<td>General Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

ADDITIONAL LOWER DIVISION REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Long Beach
BA 111 Introduction to Business Law | 3 |
BUSA 240 Cost Accounting | 4 |
CIS 101 Introduction to Business Computer Information Systems | 3 |
DRAF 237 Graphical Statistics and Strength of Materials | 3 |
MATH 112 Elementary Statistics | 4 |

California State Polytechnic University - Pomona
ARCH 121 Materials and Methods of Building Construction | 3 |
ENGR 235 Statics | 3 |

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 requirements.

CAREER OPPORTUNITIES:
After transfer and completion of the Bachelor's Degree program, a student is qualified to work in careers such as designer, project manager, field engineer, service engineer, manufacturing and test supervisor, sales engineer, and technical representative. While there are many overlapping areas, the industrial technologist or engineering technologist is employed for central purpose of supporting the practical side of engineering achievement with emphasis upon the end product (Production Management) rather than the conceptual process.

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

Industrial Technology — Electronics
OPTION — 836
TRANSFER PROGRAM
COMMON LOWER DIVISION PREPARATION
FOR THE CALIFORNIA STATE UNIVERSITY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>DRAF 131</td>
<td>Fundamentals of Drafting Including AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Principles</td>
<td>3</td>
</tr>
<tr>
<td>EL 110</td>
<td>Principles of DC Electronics</td>
<td>4</td>
</tr>
<tr>
<td>EL 110L</td>
<td>DC Electronics Laboratory</td>
<td>1</td>
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<tr>
<td>EL 114</td>
<td>Fundamentals of Digital Electronics</td>
<td>3</td>
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<tr>
<td>EL 114L</td>
<td>Fundamentals of Digital Electronics Lab</td>
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<td>EL 120</td>
<td>Principles of AC Electronics</td>
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<tr>
<td>EL 120L</td>
<td>AC Electronics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>EL 200</td>
<td>Semi-Conductor Circuits</td>
<td>3</td>
</tr>
<tr>
<td>EL 200L</td>
<td>Semi-Conductor Circuits Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>EL 210</td>
<td>Electronic Systems Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EL 210L</td>
<td>Systems Analysis</td>
<td>1</td>
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<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</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
CIS 101 Introduction to Computer Information Systems | 3 |
CIS 177 Programming in Pascal | 4 |
OR CIS 280 Object-Orientated Programming in C++ | 3 |
DRAF 237 Graphical Statistics and Strength of Materials | 3 |
MATH 112 Elementary Statistics | 4 |

California State Polytechnic University - Pomona
CIS 230 Assembly Programming for Microcomputers | 4 |
ENGR 235 Statics | 3 |

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 requirements.

CAREER OPPORTUNITIES:
After transfer and completion of the Bachelor's Degree program, a student is qualified to work in careers such as designer, project manager, field engineer, service engineer, manufacturing and test supervisor, sales engineer, and technical representative. While there are many overlapping areas, the industrial technologist or engineering technologist is employed for central purpose of supporting the practical side of engineering achievement with emphasis upon the end product (Production Management) rather than the conceptual process.

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

Industrial Technology—Manufacturing Option—835
TRANSFER PROGRAM
COMMON LOWER DIVISION PREPARATION
FOR THE CALIFORNIA STATE UNIVERSITY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>DRAF 131</td>
<td>Fundamentals of Drafting Including AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Principles</td>
<td>3</td>
</tr>
<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

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) the above-required courses, (2) electives as needed, and (3) the Associate in Arts Degree requirements.

CAREER OPPORTUNITIES:
After transfer and completion of the Bachelor's Degree program, a student is qualified to work in careers such as designer, project manager, field engineer, service engineer, manufacturing and test supervisor, sales engineer, and technical representative. While there are many overlapping areas, the industrial technologist or engineering technologist is employed for central purpose of supporting the practical side of engineering achievement with emphasis upon the end product (Production Management) rather than the conceptual process.

See Cerritos College Graduation Requirements.
See State University General Education List.
ADDITIONAL LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Long Beach
CIS 101 Introduction to Business Computer Information Systems 3
DRAF 237 Graphical Statistics and Strength of Materials 3
DRAF 258 Design and Production Technology 4
MTT 100 Machine Tool Introduction 2.5
MATH 112 Elementary Statistics 4

California State Polytechnic University - Pomona
(Manufacturing/ Mechanical)
ENGR 135 Statics 3
WELD 100 Welding Fundamentals 2

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) the above-required courses, (2) electives as needed, and (3) the Associate in arts degree requirements.

CAREER OPPORTUNITIES: After transfer and completion of the Bachelor's Degree Program, serve in reliability, quality control; quality assurance, inspection, metrology, configuration management and testing aspects of manufacturing enterprises.

INDUSTRIAL TECHNOLOGY—QUALITY ASSURANCE—838
TRANSFER PROGRAM
The following program of study has been designed to prepare students for transfer to California State University, Long Beach - Engineering Technology.

UNITs
BA 111 Business Law 3
CIS 101 Introduction to Business Computer Information Systems 3
CHEM 111 General Chemistry 5
DRAF 131 Fundamentals of Drafting Including AutoCAD 3
DRAF 237 Graphical Statistics and Strength of Materials 3
ECON 201 Principles 3
MATH 112 Elementary Statistics 4
MATH 170 Analytic Geometry and Calculus I 4
PHIL 106 Introduction to Logic 3
PHYS 101 General Physics 4
PHYS 102 General Physics 4
Quality Control Courses
MET 100A Metallurgy and Non-Metallic Materials 3
MTT 100 Machine Tool Introduction 2.5
MET 120 Non-Destructive Testing 3

CAREER OPPORTUNITIES: After transfer and completion of the Bachelor's Degree Program, serve in reliability, quality control; quality assurance, inspection, metrology, configuration management and testing aspects of manufacturing enterprises.

INDUSTRIAL TECHNOLOGY—AUTOMATED MANUFACTURING—839
CERTIFICATE OF ACHIEVEMENT

UNITs
MTT 100 Modern Manufacturing Concepts and Techniques 2.5
MTT 170 Computer Numerical Control Programming 4
PMT 66 Hydraulics and Pneumatics 3
EL 96A Introduction to Automated Manufacturing (Robotics) 4
EL 96B Automated Manufacturing (Advanced Robotics) 4
EL 110 Principles of DC Electronics 3
EL 110L DC Electronics Laboratory 1
EL 114 Fundamentals of Digital Electronics 3
EL 114L Fundamentals of Digital Electronics Lab 1
EL 124 Advanced Digital Electronics 3
EL 124L Advanced Digital Electronics Lab 1
EL 244 Introduction to Microcomputers 4

TOTAL UNITS 39

ASSOCIATE IN ARTS DEGREE REQUIREMENTS
Complete 60 units to include (1) the Certificate of Achievement requirements, (2) DRAF 38, (3) the Associate in Arts Degree general education requirements, and (4) electives as needed.

RECOMMENDED ELECTIVES: PHYS 2.1

INTERNATIONAL STUDIES PROGRAM
GLOBAL POLITICS/ DIPLOMACY—515
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

SELECT 6 UNITS OF THE FOLLOWING:
HIST 221 History of Americas 3
HIST 265 Selected Problems in Contemporary Asiatic History 3

DIVISION REQUIREMENTS

UNITs
ENGL 106 Introduction to Language Study 3
POL 220 Comparative Government 3

SELECT 6 UNITS OF THE FOLLOWING:
POL 230 Contemporary Political Issues: Middle East 3
HIST 221 History of Americas 3
HIST 265 Selected Problems in Contemporary Asiatic History 3

120
HIST 255  History of Russia and the Soviet Union  3
ECON 101  American Economic System  3

TOTAL CERTIFICATE REQUIREMENTS 24

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

GLOBAL RESOURCES— 516
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 101L  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 International Business and complete electives and general education requirements to achieve a minimum of 60 units.

INTERNATIONAL BUSINESS— 517
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
BA 104  Cultural Bridges for Business  3
BA 109  Marketing  3
SELECT 3 UNITS OF THE FOLLOWING:
BUSA 100  Introduction to Accounting  3
BA 112  Business Law  3
BUSF 126  Introduction to Stock Market and Investments  3
ECON 101  American Economics Systems  3

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.

VIEWING/TRANSLATING— 518
CERTIFICATE OF ACHIEVEMENT
Core Requirements (Certificate of Completion) Units
GEOG 105  World Regional Geography  3
POL 210  International Relations  3
BA 101  International Business  3
AND ONE OF THE FOLLOWING:
PHIL 200  World Religions  3
ANTH 100  Cultural Anthropology  3

Division Requirements
ENGL 106  Introduction to Language Study  3
AND ONE OF THE FOLLOWING OPTIONS:
SPAN 282  Intermediate Conversational Spanish  3
SPAN 283  Advanced Conversational Spanish  3
FREN 202  Intermediate French  4
FREN 203  Intermediate French Advanced Level I  4
GERM 203  Scientific German  4
GERM 204  Scientific German  4
JAPN 102  Elementary Japanese  5
JAPN 201  Intermediate Japanese  5
SPAN 201  Intermediate Spanish  5
AND SPAN 202  Intermediate Spanish  4
OR SPAN 112  Elementary Spanish for Spanish Speakers  5
AND SPAN 202  Intermediate Spanish  4
OR SPAN 213  Living Spanish Grammar and Written Communication  2
SPAN 214  Living Spanish Grammar and Written Communication  2
AND SPAN 202  Intermediate Spanish  4

TOTAL CERTIFICATE REQUIREMENTS 24

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

WORLD CULTURES— 519
CERTIFICATE OF ACHIEVEMENT
Core Requirements (Certificate of Completion) Units
GEOG 105  World Regional Geography  3
POL 210  International Relations  3
BA 101  International Business  3
AND ONE OF THE FOLLOWING:
PHIL 200  World Religions  3
ANTH 100  Cultural Anthropology  3

Division Requirements
ENGL 106  Introduction to Language Study  3
HUM 100  The Art of Being Human  3
SELECT 6 UNITS FROM THE FOLLOWING:
HIST 230  History of Mexico  3
HIST 260  Survey of Asian History  3

TOTAL CERTIFICATE REQUIREMENTS 24

121
PHIL 200  World Religions  3
ANTH 100  Cultural Anthropology  3
ANTH 202  Ancient Civilizations of the Americas  3
GEOG 102  Natural and Cultural Geography  3

TOTAL CERTIFICATE REQUIREMENTS  24

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

JOURNALISM — 140
ASSOCIATE IN ARTS DEGREE PROGRAM

Core Requirements (19 units)  UNITS
JOUR 100  Introduction to Mass Communication  3
JOUR 101  Beginning Newswriting and Reporting  3
JOUR 103  Newspaper Article Writing  2
JOUR 105  Newspaper Production  2
JOUR 130  Photo Journalism  3
ART 188  Design/Desktop Publishing  3
CIS 121  Introduction to Internet  1.5
CIS 205  Programming HTML for Web  1.5

Department Requirements (10 units)
JOUR 110  Principles of Public Relations  3
JOUR 298  Directed Studies in Journalism  1
or JOUR 50  Editorial Board  1
Plus a minimum of five units in additional Journalism courses  5

NOTE: Journalism students intending to transfer to a four-year college are referred to the Transfer Journalism Program of Study 145.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete a minimum of 60 units to include (1) the above Journalism courses and unit requirements, (2) AA Degree General Education Requirements, and (3) electives as needed.

CERTIFICATE OF ACHIEVEMENT — 140

JOURNALISM Major Department Core Requirements  19
JOURNALISM Major Department Requirements  10
JOURNALISM Certificate Requirements  9
BA 109  Marketing  3
or BA 110  Advertising  3
JOUR 299  Directed Studies (should be internship experience)  2

Certificate Electives (2 Units Minimum)
PHOT 110  Digital Imaging  3
or ART 192  Digital Imaging  3
TH 152  Introduction to Broadcasting  3
ART 194  Multimedia Design  3
ENGL 155  Introduction to Technical Writing  3
PHOT 100  Introduction to Photography  3
POL 101  American Political Institutions  3
SPCH 160  Parliamentary Procedure  1

TOTAL CERTIFICATE UNITS  38

BROADCAST JOURNALISM — 141
CERTIFICATE OF ACHIEVEMENT
The certificate helps the student focus on the study of and preparation for entry level employment in the growing field of broadcast news at radio stations and television stations, and in online journalism ventures.

Broadcast Journalism Certificate Requirements  17
JOUR 100  Introduction to Mass Communications  3
JOUR 101  Beginning Newswriting  3
JOUR 170  Broadcast News  1
TH 152  Introduction to Broadcasting  3
TH 155  Radio Production  3

Plus four units of the following:
JOUR 120  Internet for Journalists  2
JOUR 170  Broadcast News  1*
SPCH 100  Fundamentals of Oral Communication  3
SPCH 140  Oral Interpretation of Literature  3
SPCH 240  Oral Interpretation — Reader’s Theater  3
TH 108  Improvisation for Theater  3
TH 117  Stand-Up Comedy  3

*May be repeated; a maximum of 2 units may be applied.

ONLINE JOURNALISM — 142
CERTIFICATE OF ACHIEVEMENT
The certificate helps the student focus on the study of and preparation for entry level employment in the growing field of online journalism. The certificate should be particularly helpful to those who will be helping small publications start online news ventures.

Online Journalism Certificate Requirements  17
JOUR 100  Introduction to Mass Communications  3
JOUR 101  Beginning Newswriting  3
JOUR 120  Internet for Journalists  2
PHOT 110  Introduction to Digital Imaging  3
or ART 192  Digital Imaging  3

Plus one unit from the following:
JOUR 298  Directed Studies  1
or JOUR 50L  Editorial Board  1

Plus two units from the following:
JOUR 103  Newspaper Article Writing  2
or JOUR 105  Newspaper Production  2

And three units from the following:
ART 52  Introduction to Web Design Graphics  3
CIS 205  Programming in HTML  1.5
CIS 120  Microsoft Front Page  1.5
PHOT 112  Intermediate Digital Photography  3

PHOTOJOURNALISM — 143
CERTIFICATE OF ACHIEVEMENT
The certificate helps the student focus on the study of and preparation for entry level employment in the field of photojournalism. The certificate should be particularly helpful to those looking for employment at newspapers, magazines, corporate and government public relations departments and online journalism ventures.

Photojournalism Certificate Requirements  17
JOUR 130  Introduction to Photojournalism  3
**Curricula, Requirements for Majors, Certificates and Transfer Programs**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>PHOT 100</td>
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<tr>
<td>PHOT 110</td>
<td>Introduction to Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>BA 100</td>
<td>Fundamentals of Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSA 100</td>
<td>Introduction to Accounting</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 105</td>
<td>Newspaper Production (can be repeated)</td>
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<tr>
<td>JOUR 160L</td>
<td>Magazine Production (can be repeated)</td>
<td>1**</td>
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<tr>
<td>JOUR 298</td>
<td>Directed Studies (maximum 1 unit)</td>
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<tr>
<td>JOUR 299</td>
<td>Directed Studies (internship-maximum 2 units)</td>
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</tr>
<tr>
<td>BA 110</td>
<td>Advertising</td>
<td>-3</td>
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</table>

*may be repeated; a maximum of four units may be applied
**may be repeated; a maximum of two units may be applied

**PUBLIC RELATIONS — 147**

**CERTIFICATE OF ACHIEVEMENT**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
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<tbody>
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<td>Journalism Major Department Requirements</td>
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<td>Public Relations Certificate Requirements</td>
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<tr>
<td>BA 100</td>
<td>Fundamentals of Business</td>
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<tr>
<td>BA 109</td>
<td>Marketing</td>
</tr>
<tr>
<td>or BA 110</td>
<td>Advertising</td>
</tr>
<tr>
<td>JOUR 299</td>
<td>Directed Studies</td>
</tr>
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</table>

**CERTIFICATE ELECTIVE (1 UNIT MINIMUM)**

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<th>Course Title</th>
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<td>3</td>
</tr>
<tr>
<td>or ART 192</td>
<td>Digital Imaging</td>
<td>3</td>
</tr>
<tr>
<td>TH 152</td>
<td>Introduction to Broadcasting</td>
<td>3</td>
</tr>
<tr>
<td>ART 194</td>
<td>Multimedia Design</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 155</td>
<td>Introduction to Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 100</td>
<td>Introduction to Photography</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 160</td>
<td>Parliamentary Procedure</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE UNITS** 38

See Cerritos College Graduation Requirements.

**CAREER OPPORTUNITIES:** The A.A. Degree, the Certificate in Public Relations, and the Certificate in Journalism by themselves, or with other education and degrees as appropriate, may directly or indirectly enhance employment potential in a broad job spectrum where media communications and related analytical skills are desirable. These include writer/reporter/editor for both print and broadcast/electronic journalism media (newspaper, magazine, radio, TV, etc.), corporate communications and public relations, public information and publicity, business and industrial journalism, newsletter writer and publisher, freelance writer, photographer, advertising copywriter and salesperson, journalism teacher and student publications adviser, non-fiction book and article writer, editorial and publications services consultant, and myriad other publishing and related areas.

**JOURNALISM — 145**

**TRANSFER PROGRAM**

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

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

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

**California State University - Fullerton**

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journalism Concentration, Communications Major</td>
<td>JOUR 201</td>
<td>Advanced Reporting and Editing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHOT 100</td>
<td>Introductory Photography</td>
<td>3</td>
</tr>
</tbody>
</table>

**Broadcast Journalism Concentration, Communications Major**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH 258</td>
<td>Broadcast Writing/Pre-Production</td>
<td>3</td>
</tr>
</tbody>
</table>

Other Journalism options: Print Journalism, Journalism Education, Photojournalism, and Public Relations.

**THE UNIVERSITY OF CALIFORNIA**

There is no Journalism major at any campus of the University of California.

**NOTE:** The ability to word process and use the Internet are prerequisites for all students majoring in Journalism. See the Fine Arts Counselor for lower division preparation for other California State University Broadcast Journalism programs.

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

- Complete a minimum of 60 units to include: (1) the above required courses plus electives in Journalism and Photography for a minimum of 18 units, (2) AA Degree general education requirements, and (3) electives as needed.

See Cerritos College Graduation Requirements.

**KINESIOLOGY**

**TRANSFER PROGRAM (SEE PHYSICAL EDUCATION)**

**LEGAL STUDIES—272**

**TRANSFER PROGRAM**

This is a multi-discipline program for students without a designated major interested in the study of the law. This program is designed to provide the students with a broad background in the areas of Administration of Justice, Business, Economics, History, Philosophy, and Political Science. Admission to law school does not require any specific major, and admission is based primarily on academic excellence and L.S.A.T. test achievement. Students interested in entering law school with a designated major should remain in their present major.

**COURSE REQUIREMENTS**

This program requires a selection of two courses from at least three areas, for a total of 18 units for the major in Legal Studies. This
program is designed to transfer to various universities. Please check with your counselor regarding general education requirements for specific transfer institutions.

A. **Administration of Justice**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>AJ 102</td>
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<td>AJ 202</td>
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<tr>
<td>AJ 103</td>
<td>3</td>
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B. **Business Administration**

<table>
<thead>
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<th>Course</th>
<th>Units</th>
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<tr>
<td>BA 111</td>
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<tr>
<td>BA 112</td>
<td>3</td>
</tr>
<tr>
<td>BL 101</td>
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C. **Economics**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>ECON 201</td>
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<tr>
<td>ECON 202</td>
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D. **History**

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<tr>
<td>HIST 201</td>
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<tr>
<td>HIST 202</td>
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<tr>
<td>OR</td>
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<tr>
<td>HIST 240</td>
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<tr>
<td>HIST 241</td>
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E. **Philosophy**

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<tr>
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F. **Political Science**

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<th>Units</th>
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<tr>
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<td>3</td>
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<tr>
<td>POL 210</td>
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</table>

**ELECTIVES**

Choose those courses from academic areas that represent a broad academic background of courses that specifically apply towards a bachelor's degree at the transfer institution.

For information regarding law schools for legal and paralegal training institutions, contact the American Bar Association, 750 N. Lake Shore Drive, Chicago, IL 60611.

For more complete up-to-date information regarding requirements in legal careers and legal programs at other colleges and universities, please contact the Cerritos College legal counselor.

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS**

The completion of 60 units, including the above required courses and the Associate in Arts general education requirements qualifies a student for the Associate in Arts degree in Legal Studies.

**CAREER OPPORTUNITIES**

A licensed attorney at law may practice law in many specialized areas of the law or become a general practitioner. Attorneys are employed at all levels of government. Industry employs lawyers at numerous occupational positions. Check with your counselor for other occupational positions that are related to the legal area.

**MACHINE MOLDMAKING FOR PLASTICS—847**

**CERTIFICATE OF ACHIEVEMENT**

**REQUARED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<td>MMP 50</td>
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<td>MMP 51</td>
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<tr>
<td>MTT 100</td>
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<tr>
<td>MTT 170</td>
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<tr>
<td>WELD 100</td>
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<tr>
<td>*DRAF 131</td>
<td>2</td>
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</tbody>
</table>

**MET 100A  Metallurgy & Non-Metallic Materials  3**
| PMT 100    | Plastics Technology I | 2.5 |
| TM 50      | Technical Mathematics  | 3   |
| OR MATH 80 | Intermediate Algebra   | (4) |

**TOTAL CERTIFICATE REQUIREMENTS 44 (45)**

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

Complete 60 units to include (1) the specific requirements for the Certificate of Achievement above,(2) TM 2, MFGT 100, NC 21,(3) the Associate in Arts general education requirements, and (4) electives as needed.

Recommended electives for minimum 60 units: BCOM 48, AND BCOM 47 are recommended for learning skills in general education.

**CAREER OPPORTUNITIES:** Upon completion of the program, a student is prepared to work in the mold making processes of the plastics industry.

See Cerritos College Graduation Requirements.

**MACHINE TOOL TECHNOLOGY—860**

**CERTIFICATE OF ACHIEVEMENT**

**COMPUTER NUMERICAL CONTROL**

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**DRAFTING**

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<tr>
<td>DRAF 131</td>
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**TOTAL CERTIFICATE REQUIREMENTS 41.5**

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

Complete 60 units to include (1) the above requirements for a Certificate of Achievement,(2) MFGT 100A, MTT 1L, DRAF 138, TM 50 (3) the A.A. Degree requirements, and (4) electives as needed.

**RECOMMENDED ELECTIVES:** MFGT 100, MTT 1L, MTT 80.

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

See Cerritos College Graduation Requirements.
**MANUFACTURING TECHNOLOGY (MFGT)**

**CERTIFICATION OF COMPLETION REQUIREMENTS**

The four and a half to six units for the specialty may come from the units completed toward the degree or from additional courses outlined below. Students with previous coursework may also be considered for certificates upon providing transcripts for review through the matriculation process.

Quality Assurance (QA)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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<td>MFGT 55</td>
<td>Quality Control (QC)</td>
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<td>MFGT 57</td>
<td>Total Quality Management (TQM)</td>
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Quality Control (QC)

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<td>MFGT 55</td>
<td>Quality Control (QC)</td>
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<td>MFGT 53</td>
<td>Statistical Process Control (SPC)</td>
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Statistical Process Control (SPC)

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<tbody>
<tr>
<td>MFGT 55</td>
<td>Quality Control (QC)</td>
<td>1.5</td>
</tr>
<tr>
<td>MFGT 53</td>
<td>Statistical Process Control (SPC)</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>Technical Math</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

Total Quality Management (TQM)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>MFGT 57</td>
<td>Total Quality Management (TQM)</td>
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</tr>
<tr>
<td>MFGT 60</td>
<td>Quality Assurance (QA)</td>
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</tr>
<tr>
<td>MFGT 59</td>
<td>Design of Experiments (DOE)</td>
<td>1.5</td>
</tr>
<tr>
<td>MFGT 58</td>
<td>Benchmarking</td>
<td>1.5</td>
</tr>
<tr>
<td>ISO 9000</td>
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Advanced Quality Systems (AQS)

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<th>Description</th>
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<tbody>
<tr>
<td>MFGT 57</td>
<td>Total Quality Management (TQM)</td>
<td>1.5</td>
</tr>
<tr>
<td>MFGT 53</td>
<td>Statistical Process Control (SPC)</td>
<td>1.5</td>
</tr>
<tr>
<td>MFGT 58</td>
<td>Benchmarking</td>
<td>1.5</td>
</tr>
<tr>
<td>MFGT 59</td>
<td>Design of Experiments (DOE)</td>
<td>1.5</td>
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**MATHEMATICS— 620**

**TRANSFER PROGRAM**

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

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>MATH 150</td>
<td>Pre-Calculus Mathematics</td>
<td>4</td>
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<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Analytical Geometry and Calculus III</td>
<td>4</td>
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<tr>
<td>MATH 240</td>
<td>Calculus and Differential Equations</td>
<td>4</td>
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<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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<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>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>Engineering Physics</td>
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<td>PHYS 203</td>
<td>Engineering Physics</td>
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**California State University - Dominguez Hills**

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<thead>
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<tr>
<td>PHH 201</td>
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<tr>
<td>PHH 202</td>
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<td>4</td>
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<tr>
<td>(Math Education option, also take MATH 112)</td>
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**California State University - Fullerton**

Common Lower Division preparation and completion of a "cognate". Please see a counselor for details of this requirement.

**California State University - Long Beach**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
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<tbody>
<tr>
<td>CISP 180</td>
<td>Programming in C/C++</td>
<td>3</td>
</tr>
<tr>
<td>OR CISP 280</td>
<td>Object-Oriented Programming in C++</td>
<td>(3)</td>
</tr>
<tr>
<td>ENGL 100</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>Engineering Physics</td>
<td>4</td>
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**California State University - Los Angeles**

<table>
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<th>Description</th>
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<tbody>
<tr>
<td>CISP 178</td>
<td>Programming in Fortran</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
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<tr>
<td>PHYS 202</td>
<td>Engineering Physics</td>
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**California State Polytechnic University - Pomona**

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<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
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<tbody>
<tr>
<td>CISP 180</td>
<td>Programming in C/C++</td>
<td>3</td>
</tr>
<tr>
<td>OR CISP 178</td>
<td>Programming in Fortran</td>
<td>(3)</td>
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<td></td>
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**University of California - Irvine**

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<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CISP 180</td>
<td>Programming in C/C++</td>
<td>3</td>
</tr>
<tr>
<td>OR CISP 280</td>
<td>Object-Oriented Programming in C++</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>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>
<tr>
<td>OR PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>AND PHYS 203</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>See a counselor for teaching specialization.</td>
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</table>

**University of California - Los Angeles**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISP 280</td>
<td>Object-Oriented Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>And two additional courses from:</td>
<td></td>
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<tr>
<td>BIO 100</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
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<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>5</td>
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<tr>
<td>PHYS 202</td>
<td>Engineering Physics</td>
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<tr>
<td>PHYS 203</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>See a counselor for teaching specialization.</td>
<td></td>
</tr>
</tbody>
</table>

**ASSOCIATE IN ARTS DEGREE:**

Complete the above common lower division requirements and all AA degree general education requirements for a total of at least 60 units.

**CAREER OPPORTUNITIES:** After transfer to a four year university and completion of the Bachelor's Degree program, graduates qualify for positions as mathematicians in government and industry, secondary teaching, graduate study, statisticians, and careers in computer science.

See Cerritos College Graduation Requirements.

See University General Education List.
M EDICAL ASSISTANT
PATIENT CARE AREAS

VERIFICATION OF COMPLETION
Medical Assistant-Front Office

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA 60</td>
<td>Introduction to Medical Assisting</td>
</tr>
<tr>
<td>MA 62</td>
<td>Medical Insurance and Liability</td>
</tr>
<tr>
<td>MA 161</td>
<td>Medical Terminology</td>
</tr>
<tr>
<td>CIS 102</td>
<td>Introduction to Microcomputers Using Microsoft Office</td>
</tr>
<tr>
<td>SPCH 45</td>
<td>Speech Communication for Careers</td>
</tr>
<tr>
<td></td>
<td><strong>Total Verification Requirements</strong></td>
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<tr>
<td></td>
<td><strong>12</strong></td>
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</tbody>
</table>

Employment in this field requires good vision, hearing, and the ability to communicate orally. In addition, the student must have the ability to comprehend and interpret written communication.

CAREER OPPORTUNITIES: Upon completion of the program, employment is available in a physician’s office, large HMO, or hospital at an entry level position; i.e., receptionist, insurance clerk, and/or ward clerk.

Medical Assistant - Lab Technician

A Verification of Completion shall be awarded to the student who completes with a grade of "C" or better the following courses:

- HO 54 Medical Laboratory Skills
- HO 55 Phlebotomy Procedures
- MA 161 Medical Terminology
- SPCH 45 Speech Communication for Careers

**Total Units:** 6

Medical Assistant - Phlebotomist

A Verification of Completion shall be awarded to the student who completes with a grade of "C" or better the following courses:

- HO 55 Phlebotomy Procedures
- MA 161 Medical Terminology
- SPCH 45 Speech Communication for Careers

**Total Units:** 5

Medical Assistant - EKG Technician

A Verification of Completion shall be awarded to the student who completes with a grade of "C" or better the following courses:

- HO 53 Electrocardiography
- MA 161 Medical Terminology
- SPCH 45 Speech Communication for Careers

**Total Units:** 5

M EDICAL ASSISTANT—911

Certification of Achievement

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA 60</td>
<td>Introduction to Medical Assisting</td>
</tr>
<tr>
<td>MA 62</td>
<td>Medical Insurance and Liability</td>
</tr>
<tr>
<td>MA 161</td>
<td>Medical Terminology</td>
</tr>
<tr>
<td>CIS 102</td>
<td>Introduction to Microcomputers Using Microsoft Office</td>
</tr>
<tr>
<td>SPCH 45</td>
<td>Speech Communication for Careers</td>
</tr>
<tr>
<td></td>
<td><strong>Total Verification Requirements</strong></td>
</tr>
<tr>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Employment in this field requires good vision, hearing, and the ability to communicate orally. In addition, students must have the ability to comprehend, analyze, and evaluate patients' charts in order to provide appropriate treatment. Applicants must be able to record in patients' charts and have the dexterity to use small instruments to provide patient care.

Health clearances will vary depending on where lab experiences will be completed (MA 68, MA 73, MA 74). Students must present evidence of compliance with facility health standards. Standards may include, but are not limited to, TB testing and immunizations. Immunization records meeting the standards of the clinical site must be completed before the first class session.

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 health clearance and current certification in CPR and First Aid training. Health clearance, CPR, and First Aid requirements must be valid for the duration of the clinical affiliation and must be submitted prior to placement in the clinical site. Student placements are predominately during the day hours.

CPR certification may be obtained through American Heart Association Health Care Provider training (industry preferred) or American Red Cross Professional Rescue Training. Standard First Aid training is available through the American Red Cross.

M EDICAL ASSISTANT—911

Certification of Achievement

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA 60</td>
<td>Introduction to Medical Assisting</td>
</tr>
<tr>
<td>MA 62</td>
<td>Medical Insurance and Liability</td>
</tr>
<tr>
<td>MA 64</td>
<td>Medical Office Assisting</td>
</tr>
<tr>
<td>MA 66</td>
<td>Medications and Specialties</td>
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<tr>
<td>MA 67</td>
<td>Medical Office Administration</td>
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<tr>
<td>MA 68</td>
<td>Medical Assisting Internship Experience</td>
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<td>MA 73</td>
<td>Medical Assisting Occupational Work Experience</td>
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<tr>
<td>MA 74</td>
<td>Medical Assisting Occupational Work Experience</td>
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<tr>
<td>MA 161</td>
<td>Medical Terminology</td>
</tr>
<tr>
<td>HO 53</td>
<td>Electrocardiography</td>
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<tr>
<td>HO 54</td>
<td>Medical Laboratory Skills</td>
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<tr>
<td>HO 55</td>
<td>Phlebotomy Procedures</td>
</tr>
<tr>
<td>HO 151</td>
<td>Elements of Nutrition</td>
</tr>
<tr>
<td>OR HO 152</td>
<td>Nutrition          (3)</td>
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Curricula, Requirements for Majors, Certificates and Transfer Programs

PSYCHOLOGY
PSYC 101 General Introductory Psychology 3
OR PSYC 150 Personal and Social Adjustment (3)
TOTAL CERTIFICATE REQUIREMENTS (28)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 who are currently employed in a medical office up to 19 hours per week, should enroll in MA 73. Students who are currently employed in a medical office more than 20 hours per week should enroll in MA 74.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Medical Assisting. Plus, for an A.A. Degree a student must take A&P 120, electives and general education requirements to achieve a minimum of 60 units. See Cerritos College Graduation Requirements.

CAREER OPPORTUNITIES: Upon completion of the program, employment is available in a doctor's office working in a front or back office environment as a receptionist, insurance clerk and assisting the doctor.

See Cerritos College Graduation Requirements.

METALLURGY AND MATERIALS SCIENCE—862 CERTIFICATE OF ACHIEVEMENT PROGRAM

WELDING

WELD 100 Welding Fundamentals 2

METALLURGY

MET 50 Heat Treatment of Nonferrous Metals 2
MET 100A Metallurgy I 3
MET 120 Nondestructive Testing 3
MET 130A Heat Treatment of Iron and Steel 2

CHEMISTRY

CHEM 100 Introductory Chemistry 4
OR CHEM 110 Elementary Chemistry (4)

TECHNICAL MATHEMATICS

TM 50 Technical Mathematics 3
OR MATH 80 Intermediate Algebra (4)
OR MATH 140 Trigonometry (3)

Total Certificate Requirements 31 (32)

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete 60 units to include: (1) the above requirements for the Certificate of Achievement, (2) BCOM 148 or ENGL 100; or PHYS 100, or PHYS 101; MFGT 100; (3) the Associate in Arts Degree general education requirements, and (4) electives as needed.

RECOMMENDED ELECTIVES: MTT 170, DRAF 153

CAREER OPPORTUNITIES: The metallurgical technician may work several areas, such as metallographic lab, heat treating, quality control, research, non-destructive testing, physical testing, and engineering liaison.

See Cerritos College Graduation Requirements.

Metallurgy and Materials Science (MET)

Specialty Requirements
In order to obtain a Metallurgy Specialty, the student is encouraged to complete the required units for the Metallurgy and Materials Science degree. The four and a half to seven and a half 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.

Metallurgy and Materials Science Specialty

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>MET 100A</td>
<td>3.0</td>
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<tr>
<td>MET 100B</td>
<td>2.5</td>
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<tr>
<td><strong>Total</strong></td>
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Ferrous Metallurgy Specialty

<table>
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<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>MET 52L</td>
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<tr>
<td>MET 100A</td>
<td>3.0</td>
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<tr>
<td><strong>Total</strong></td>
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Nonferrous Metallurgy Specialty

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<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>MET 54</td>
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<td>MET 56</td>
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<td>MET 100A</td>
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Nondestructive Testing Specialty (NDT)

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<td>MET 100A</td>
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<tr>
<td>MET 120</td>
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<td><strong>Total</strong></td>
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Ferrous Heat Treat Specialty

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<tbody>
<tr>
<td>MET 50L</td>
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</tr>
<tr>
<td>MET 53</td>
<td>2.5</td>
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<td>MET 100A</td>
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Nonferrous Heat Treat Specialty

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>MET 52L</td>
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<td>MET 56</td>
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<td>MET 100A</td>
<td>3.0</td>
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<tr>
<td><strong>Total</strong></td>
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Laboratory Specialty

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<tbody>
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<td>3.0</td>
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Welding Metallurgy Specialty

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<tbody>
<tr>
<td>MET 51</td>
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<tr>
<td>MET 52L</td>
<td>0.5</td>
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<tr>
<td>MET 100A</td>
<td>3.0</td>
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<tr>
<td><strong>Total</strong></td>
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</table>
Curricula, Requirements for Majors, Certificates and Transfer Programs

Quality Specialty
MET 52L Metallurgy Specialty Lab 0.5
MFGT 53 Statistical Process Control (SPC) 1.5
MFGT 60 Quality Assurance (QA) 1.5
MET 100A Metallurgy I 3.0

TOTAL: 6.5

MICROBIOLOGY—660

TRANSFER PROGRAM

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

UNITS
BIOL 200 Principles of Biology 5
BIOL 201 Principles of Biology 5
CHEM 111 General Chemistry 5
CHEM 112 General Chemistry 5
MICR 200 Principles and Applications of Microbiology 5

LOWER DIVISION MAJOR REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS

California State University—Dominguez Hills
MATH 112 Elementary Statistics
MATH 116 Calculus for Managerial, Biological, and Social Sciences 4
OR MATH 170 Analytic Geometry and Calculus I (4)
PHYS 101 General Physics 4
AND PHYS 102 General Physics 4
OR PHYS 201 Engineering Physics 4
AND PHYS 202 Engineering Physics 4

California State University—Long Beach
CHEM 205 Quantitative Analysis Chemistry 4
MATH 116 Calculus for Managerial, Biological, and Social Sciences 4
OR MATH 170 Analytic Geometry and Calculus I (4)
PHYS 101 General Physics 4
PHYS 102 General Physics 4

California State University—Los Angeles
CHEM 205 Quantitative Analysis Chemistry 4
MATH 150 Pre-Calculus Mathematics 4
MATH 140 Trigonometry 3

California State Polytechnic University—Pomona
(Microbiology Medical Technology)
A&P 200 Human Anatomy 5
A&P 201 Human Physiology 5
See a counselor for further information

University of California—Los Angeles
CHEM 211 Organic Chemistry 5
CHEM 212 Organic Chemistry 5
MATH 170 Analytic Geometry and Calculus I 4
MATH 170 Analytic Geometry and Calculus II 4
PHYS 201 Engineering Physics 4
PHYS 202 Engineering Physics 4
PHYS 203 Engineering Physics 4

TOTAL: 16.5

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 requirements.

CAREER OPPORTUNITIES: Bachelor’s Degree programs with an emphasis in Microbiology are designed to qualify the student for graduate study in the field. Various types of Federal employment; State Civil Service work such as Public Health Microbiologist; industrial microbiological work in divergent fields such as the pharmaceutical industry, brewing, industrial fermentation's, and the dairy industry; work as a hospital microbiologist or research technician positions in University research projects.

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

MUSIC

PIANO VERIFICATION OF COMPLETION

The two-level verification of completion piano teaching program is designed to include the following objectives:

a. To improve skills at the keyboard
b. To develop knowledge of music theory and history
c. To explore group and private piano teaching methods
d. To develop communication and organizational skills
e. To gain resourceful materials in the area of pedagogy and other related areas.

A verification 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 verification 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 VERIFICATION OF COMPLETION

UNITS
BA 53 Small Business Management 3
MUS 105 Music Fundamentals 3
MUS 106 Music Theory I 5
MUS 147 Applied Music 1
MUS 148 Private Study/Recital I 1
MUS 152 The Art of Teaching Beginning Piano 2
MUS 154 Piano Ensemble 1.5

TOTAL: 16.5

TEACHING INTERMEDIATE PIANO VERIFICATION OF COMPLETION

UNITS
MUS 100 Music Appreciation 3
MUS 107 Music Theory II 5
MUS 149 Private Study/Recital II 1
MUS 150 Private Study/Recital III 1
MUS 153 The Art of Teaching Intermediate Piano 2
MUS 154 Piano Ensemble 1.5

TOTAL: 13.5
MUSIC—GENERAL—121
ASSOCIATE IN ARTS DEGREE
REQUIRED MUSIC COURSES: MINIMUM 26-32 UNITS
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.
MUS 106,107 Theory I,II 5-5
MUS 148,149, Private Study/Recital I,II,III,IV 150,151 1-1-1-1
MUS 103 Jazz in America 3
MUS 100 Music Appreciation- 3
MUS 112,113 Piano Class I,II 2.5,2.5
MUS 116,117 Voice Class I,II 2.5
Additional Music Course Electives--3

ASSOCIATE IN ARTS DEGREE REQUIREMENTS
A minimum of 60 units to include: (1) The above music course and unit requirements, (2) the AA Degree general education requirements, and (3) electives as needed.
CAREER OPPORTUNITIES: Professional stage band, club work; arranging; copying; radio, television; choral groups; music stores; studio teaching; instrument repair.

See Cerritos College Graduation Requirements.

MUSIC—125
TRANSFER PROGRAM
TRANSFER MUSIC MAJORS: Theory, private study/recital, and performance classes are required each semester of full-time program (4 semesters). In addition, a full year of music history and literature is generally required.
Most four year colleges and universities administer a piano proficiency examination that must be passed by all music majors at their campus.
Placement in the appropriate level of theory and private study is made by the Music Department.
MUS 100 Music Appreciation 3
MUS 106,107, Theory I,II,III,IV 108,109 5,5,5,5
MUS 148,149, Private Study/Recital I,II,III,IV 150,151 1,1,1,1

VOICE STUDENTS
MUS 116,117 Voice Class I,II 2.5-2.5
MUS 112,113 Piano Class I,II 2.5-2.5

INSTRUMENTALISTS
MUS 112,113 Piano Class I,II 2.5-2.5

ADDITIONAL LOWER DIVISION REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS
University of California - Los Angeles
In addition to the common lower division transfer music major preparation listed above for transfer music majors, students must complete one year of college level foreign language.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete a minimum of 60 units to include (1) the above course requirements, (2) the AA Degree general education requirements, and (3) electives as needed.
CAREER OPPORTUNITIES: The transfer upper division programs are designed to prepare students for careers in teaching, performance, conducting, arranging in such areas as studio performance, music businesses, opera companies, symphony orchestras, commercial music groups, church music, music therapy.

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

NATURAL SCIENCES—GENERAL—600
ASSOCIATE IN ARTS DEGREE
In order to qualify for an A.A. degree in Natural Sciences -General, the following requirements must be met:
1. Completion of the A.A. degree general education and proficiency requirements;
2. Completion of a minimum of 60 degree applicable units;
3. Completion of at least 18 units of science related coursework from the following:
   a. courses in the Physical Sciences
   b. courses in the Biological Sciences
   c. a course in Mathematics above Intermediate Algebra

See Cerritos College Graduation Requirements.

NETWORKING TECHNICIANS/OPERATIONS—611
CERTIFICATE OF ACHIEVEMENT
Required Courses
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<tr>
<td>CIS 70H</td>
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</tr>
</tbody>
</table>

Total Units: 17.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete 60 units to include (1) the above requirements for a Certificate of Achievement, (2) completion of eight units of electives
listed below, (3) the Associate in Arts degree general education requirements, and (4) other electives as needed.

Elective Classes: CIS 101, EL 110, EL 114, EL 120, EL 120L, EL 124, EL 124L, EL 220L, EL 64A and EL 64B

CAREER OPPORTUNITIES: Network technician, network operator, system management engineer, network installer, MIS administrator, IT worker, computer engineer, and systems analyst.

See Cerritos College graduation requirements.

NURSING

The Cerritos College Nursing Program, accredited by the National League for Nursing, offers an opportunity to prepare for a nursing career through mastery of a specific body of knowledge and skills. To qualify for the program, students must successfully complete prerequisite courses and other requirements as stated below. The generic program (Option A) consists of four semesters of sequenced courses. Students may receive credit for prior nursing courses to facilitate advanced placement. These students include Licensed Psychiatric Technicians, Licensed Vocational Nurses, students transferring from other accredited programs, and foreign-educated nurses.

For successful completion of the nursing program, the student is required to achieve a minimum 75% in all nursing and nursing-related courses. This is consistent with the Board of Registered Nursing’s standard of competency for nursing practice. Completion of the program meets qualifications for the NCLEX-RN licensing exam.

PHILOSOPHY

Nursing is defined as a science, discipline and health care practice that focuses on the assessment, diagnosis and treatment of clients having health programs within the domain of nursing. The goals of nursing practice focus on health promotion, illness prevention, rehabilitation, and supporting the resources of the person who is ill or threatened with illness in adapting to changes within the environment.

In addition to implementing the philosophy of the College, the purpose of the Nursing Department is to provide the community with registered nurses who are capable of functioning in a variety of health care settings. To accomplish this, the Roy Adaptation Model has been selected as the primary conceptual framework. Within this framework, nurses recognize their clients as biopsychosocial beings in constant interaction with the environment. In periods of health, individuals have both innate and learned behavioral mechanisms which enable them to cope with their complex internal and external environments. In times of stress, the client’s coping mechanisms may be disrupted and the individual is defined as ill. The client’s health status is defined on a continuum from wellness to illness.

Nursing practice focuses on adaptation of the client in four major modes: physiological, self-concept, role function, interdependence. The program prepares students to understand individuals as total beings and to recognize and respect a diversity of spiritual and cultural/ethnic values.

ROLE OF THE ASSOCIATE DEGREE NURSE

The Associate Degree Nurse (ADN) graduate is prepared to function as a provider of care, manager of care and member of the discipline of nursing. As provider of care, the ADN utilizes the nursing process as a basis for decisions regarding delivery of care. As a manager of care, the ADN collaborates with other health care providers in organization and delegation of care. As a member of the discipline of nursing, the graduate is committed to professional growth, continuing learning and self-development. In fulfilling these roles, the ADN graduate utilizes critical thinking, demonstrates clinical competence, and is accountable for and committed to the value of caring.

Nursing graduates are employed in a health care delivery system that continues to grow and change. The ADN graduate is an entry-level practitioner and is competent to practice as a direct caregiver in a variety of structured settings in which service is provided to diverse client populations. ADN graduates may subsequently pursue bachelor’s, master’s and doctoral degrees in nursing in preparation for advanced levels of practice.

CONCEPT OF EDUCATION

Nursing faculty believe that the purpose of education is to enlighten and enhance the quality of life for the student, the community and clients for whom students and graduates provide care. Education based on mastery learning is viewed by the nursing faculty as a collaborative process involving college administrators and staff, nursing faculty and nursing students. Each student enters the nursing program with unique characteristics, capabilities, learning styles, and motivation for learning. To address these differences, learning experiences are structured from simple to complex.

The goal of the program is to promote students’ creative and critical thinking and personal growth based on successful learning experiences. Achievement of this goal is fostered by encouraging self-direction and by providing a variety of individual and group learning experiences. Students are expected to participate actively in the learning process.

ADMISSION REQUIREMENTS

The nursing program welcomes all applicants. To be considered for acceptance into the program, the applicant must meet the following requirements:

1. High school graduation or the equivalent.
2. Satisfactory completion of READ 54, MATH 60 (formerly MATH 30) and ENGL 52 (formerly ENGL 50.2) or equivalent with grades of Credit or “C” or higher or the college placement test process.
3. Completion of or current enrollment in prerequisite courses with grades of “C” or higher. In-progress prerequisite course must be completed with grades of “C” or higher during semester of application to maintain eligibility to enter program.
4. Overall minimum of 2.0 Grade Point Average for all college work.

APPLICATION PROCESS:

Step 1: If not previously enrolled at Cerritos College, the applicant should go to Admissions and Records (in Administration Building on Alondra Boulevard) and complete an admission form.

Step 2: The applicant should then complete the College’s assessment test process. Test schedules are available in the Counseling Department. If assessment test requirements may already have been met by equivalent measures, the applicant should see a counselor for options.
Step 3: The applicant should arrange to submit transcripts to both the Nursing Department and Admissions and Records Department.

a. Official high school transcript or GED score and transcripts of any college work completed or in progress at colleges other than Cerritos College should be sent to: Cerritos College, Admissions and Records Office, 11110 Alondra Blvd., Norwalk, CA 90650.

b. Transcripts (official or unofficial) for the above coursework and for work completed or in progress at Cerritos College to: Cerritos College, Health Occupations Division, Nursing Department, Norwalk, CA 90650.

Step 4: After assessment tests have been completed and transcripts sent, the applicant should make an appointment with a counselor by calling 562-860-2451, ext.2231; specifying that this is for completion of a nursing application. If transcripts have not been submitted prior to appointment, sealed official copies of transcripts may be hand-carried to the appointment.

Step 5: When the applicant has completed the first page of the application and the counselor has completed the second page of the application, the applicant must bring or send the application to: Cerritos College, Health Occupations Division, Nursing Department, 11110 Alondra Blvd., Norwalk, CA 90650.

Although applications may be submitted at any time, all applications and required documentation must be in the Health Occupations Division Office not later than October 1 for January admission and March 1 for August admission. It is the applicant’s responsibility to make sure that all materials are submitted by the deadline.

After the application deadline, all applications are reviewed. For each option, 50% of available spaces will be filled by waiting list (applicants who qualified in prior semesters but were not admitted) and 50% by lottery. All new and waiting list applicants are eligible for selection by lottery. A lottery is scheduled approximately six weeks after the completion of the lottery process. Applicants meeting the minimum requirements for admission based on lottery selection.

Step 6: When the applicant has completed the first page of the application and the counselor has completed the second page of the application, the applicant must bring or send the application to: Cerritos College, Health Occupations Division, Nursing Department, 11110 Alondra Blvd., Norwalk, CA 90650.

Although applications may be submitted at any time, all applications and required documentation must be in the Health Occupations Division Office not later than October 1 for January admission and March 1 for August admission. It is the applicant’s responsibility to make sure that all materials are submitted by the deadline.

After the application deadline, all applications are reviewed. For each option, 50% of available spaces will be filled by waiting list (applicants who qualified in prior semesters but were not admitted) and 50% by lottery. All new and waiting list applicants are eligible for selection by lottery. A lottery is scheduled approximately six weeks following the application deadline.

Applicants for Options B-F are selected on a space available basis. When applications are reviewed and lottery selection has been completed, applicants will be informed of their priorities for admission but it may not be possible at that time to project what openings will be available during the following semester.

SELECTION PROCEDURES AND STANDARDS

1. No application materials will be considered after the specified deadline (March 1 for Fall applicants and October 1 for Spring applicants).
2. The applicant must submit to the Health Occupations Division 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. Transcripts and work-in-progress verification
   d. Assessment test results or indication by counselor that this requirement has been met
   e. Any additional items required for specific option (see below)
3. LVN applicants and transfer students seeking entry at NRSG 208 (formerly NRSG 1.4 in curriculum being phased out) or NRSG 222 (new curriculum) will be scheduled for a medication calculation examination. Information regarding this examination will be provided prior to the testing date.
4. Option A applicants will be notified as to whether or not they were accepted into the nursing program approximately two weeks after the completion of the lottery process. Applicants seeking advanced placement will be informed of priority for admission based on lottery selection.
5. Students accepted into the nursing program and those identified as alternates are required to attend an orientation meeting. During the meeting, information will be given regarding textbooks, uniforms, registration procedures, and other content.
6. Applicants who are not admitted will receive notification indicating waiting list position. In order to maintain waiting list position, they must complete with a grade of “C” or higher any prerequisites that were in progress at time of application.
7. Student Rights: The nursing student has certain rights in addition to those reflected in the College Student Handbook. These include:
   a. The right to contact professional nursing boards regarding concerns about the educational program.
   b. The right to know of the existence of a policy giving credit for previous nursing education and/or experience.

LENGTH OF PROGRAM AND ANTICIPATED EXPENSES

The core nursing program consists of sequenced courses over a four-semester period. Prerequisite courses are completed prior to these four semesters. In addition general education courses are required for completion of the Associate of 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 $11 for California residents, $125 for non-residents of California and $140 for international students. A College Services ID fee ($10) and Health Services Fee ($10) are assessed each semester.

During the four core semesters, lab material fees total approximately $115, textbooks approximately $1500, and additional supplies and uniforms approximately $350. Students are responsible for their own living arrangements, uniform laundry and transportation to clinical agencies. Application fees for licensure as a registered nurse range from $227 to $266.25.

Information about costs of NLN-accredited nursing programs is available from the National League for Nursing Accrediting Commission, 350 Hudson Street, New York, NY 10014; telephone (212) 989-3939.

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: HO 151 or HO 152, PSYCH 101, SOC 100, ENGL 100, and SPCH 100, SPCH 130, SPCH 132, or SPCH 120. 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.
Curricula, Requirements for Majors, Certificates and Transfer Programs

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 fee is $107 and the examination registration fee is $120. In addition, the student may apply for an interim permit for $30. These fees are subject to change by the Board of Registered Nursing.

As stated in the Board of Registered Nursing's application for licensure:
Applicants are required under law to report all misdemeanor and felony convictions. "Driving under the influence" convictions must be reported. Convictions must be reported even if they have been expunged under Penal Code 1203.4 or even if court ordered diversion program has been completed under the Penal Code or under Article 5 of the Vehicle Code. Also, all disciplinary action against an applicant's registered nurse, practical nurse, vocational nurse, or other professional must be reported. Failure to report prior convictions or disciplinary action is considered falsification of application and is grounds for denial of licensure or revocation of license. ..... To make a determination [regarding eligibility for licensure] the Board considers the nature and severity of the offense, additional subsequent acts, recency of acts or crimes, compliance with court sanctions, and evidence of rehabilitation.

NURSING PROGRAM OPTIONS
There are six enrollment options in the Nursing Program:
A. Associate in Arts Degree (also referred to as the "generic" option or Associate Degree in Nursing) - 914
B. LPT-ADN (Licensed Psychiatric Technician to Associate Degree in Nursing) - 914
C. LVN-ADN (Licensed Vocational Nurse to Associate Degree in Nursing) - 914
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: ENGL 100, POL SCI 101 or POL SCI 201, PSYC 101, SOC 100, SPCH 100 or SPCH 130 or SPCH 132, and one (1) 3-unit course EACH in the following areas selected from the College's General Education Requirements (listed in the College General Catalog and Schedule of Classes): Fine Arts, Humanities and U.S. History.

A new curriculum will begin implementation in Fall 2000. Each option listed below includes two components, the curriculum being phased out (last Option A class entered in Spring 2000) which will complete its final courses in Fall 2001, and the new curriculum.

OPTION A - ASSOCIATE IN ARTS DEGREE - 914
CURRICULUM BEING PHASED OUT:
PREREQUISITES:
A&P 130 (formerly A&P 40), MICR 200 (formerly MICR 1), and HO 151 (formerly HO 51) or HO 152 (formerly HO 52) with grades of Credit or "C" or higher. Successful completion of READ 54, MATH 60 (formerly MATH 30), and ENGL 52 (formerly ENGL 50.2) or equivalents with grades of Credit or "C" or higher or the college placement test process.
 REQUIRED COURSES UNITS
Semester I
+NRSG 1.1 (NRSG 205)**Medical-Surgical Nursing I 5
+NRSG 1.2 (NRSG 206)**Medical-Surgical Nursing II 5
NRG 20 (NRSG 200)#Fundamentals of Medication for Nurses 2
+ = last offered SPR 2000
Semester II
+NRSG 1.3 (NRSG 207)**Medical-Surgical Nursing III 5
+NRSG 1.4 (NRSG 208)**Obstetrical-Pediatric Nursing 5.5
HO 236 Life Span/Health Issues 1 1
HO 237 Life Span/Health Issues 2 1
+ = last offered FA 2000
Semester III
+NRSG 2.2 (NRSG 218)**Psychosocial Nursing 3.5
+NRSG 2.1 (NRSG 219)**Medical-Surgical Nursing IV 5.5
+ = last offered SPR 2001
Semester IV
+NRSG 2.3 (NRSG 270)**Medical-Surgical Nursing V 5
+NRSG 2.4 (NRSG 280)* Professional Role Transition 3
+ = last offered FA 2001
*6-week course **9-week courses #Course must be taken prior to or concurrent with the semester listed.

NEW CURRICULUM, BEGINNING FALL 2000
PREREQUISITES:
A&P 130, MICR 200, HO 151 or HO 152, HO 236 & HO 237, and PSYC 101 or equivalents with grades of Credit or "C" or higher. Successful completion of READ 54, MATH 60, and ENGL 52 or equivalents with grades of Credit or "C" or higher or the college placement test process.

REQUIRED COURSES UNITS
Semester 1
NRSG 210 *Fundamentals of Nursing 2
NRSG 211 *Introduction to Theoretical Framework 0.5
NRSG 212 *Medical-Surgical Nursing 14.0
NRSG 213 *Survey of Pharmacology 0.5
NRSG 214 *Medical-Surgical Nursing 2 3
Semester 2
NRSG 220 **Medical-Surgical Nursing III 5
NRSG 222 **Maternal/Child Nursing 5.5
Semester 3
NRSG 230 **Psychosocial and Community Nursing 5
NRSG 232 **Medical-Surgical Nursing 45
Semester 4
NRSG 240 **Medical-Surgical Nursing 5
NRSG 242 * Professional Role Transition 3
*6-week courses **9-week courses
**OPTION B—
LPT-ADN MOBILITY PROGRAM—914**

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.

**CURRICULUM BEING PHASED OUT**

**PREREQUISITES:**

A&P 130 (formerly A&P 40), MICR 200 (formerly MICR 1), HO 152 (formerly HO 52), NRSN 25, NRSN 200 (formerly NRSN 20), NRSN 211, and NRSN 251 or equivalent with grades of Credit or "C" or higher. READ 54, MATH 60 (formerly MATH 30), and ENGL 52 (formerly ENGL 50.2) or equivalent with grades of Credit or "C" or higher or the college placement test process. Valid California LPT license.

**REQUIRED COURSES UNITS**

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<td>NRSG 2.1 (219)**Medical-Surgical Nursing IV</td>
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*6-week courses **9-week courses

**NEW CURRICULUM**

**PREREQUISITES:**

A&P 130, MICR 200, HO 152, HO 236 & 237, PSYC 101, NRSN 25, NRSN 200, NRSN 211, and NRSN 251 or equivalent with grades of Credit or "C" or higher. READ 54, MATH 60, and ENGL 52 or equivalents with grades of Credit or "C" or higher or the college placement test process. Valid California LPT license.

**REQUIRED COURSES UNITS**

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<td>NRSG 222 **Maternal/Child Nursing</td>
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<td>II</td>
<td>NRSG 230 **Psychosocial and Community Nursing</td>
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<td>II</td>
<td>NRSG 232 **Medical-Surgical Nursing 4</td>
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<td>III</td>
<td>NRSG 240 **Medical-Surgical Nursing 5</td>
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<tr>
<td>III</td>
<td>NRSG 242 *Professional Role Transition</td>
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*6-week courses **9-week courses

**OPTION C—
LVN-ADN MOBILITY PROGRAM—914**

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.

**CURRICULUM BEING PHASED OUT**

**PREREQUISITES:**

A&P 130 (formerly A&P 40), MICR 200 (formerly MICR 1), and NRSN 105 (formerly NRSN 1.5, last offered in SU 2000) or equivalent with grades of Credit or "C" or higher. Successful completion of READ 54, MATH 60 (formerly MATH 30) and ENGL 52 (formerly ENGL 50.2) or equivalent with grades of Credit or "C" or higher or the college placement test process. Valid California LVN license.

**REQUIRED COURSES UNITS**

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<td>I</td>
<td>NRSG 2.1 (219)**Medical-Surgical Nursing IV</td>
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<tr>
<td>II</td>
<td>NRSG 2.3 (270)**Medical-Surgical Nursing V</td>
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<td>II</td>
<td>NRSG 2.4 (280)*Professional Role Transition</td>
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<td>+ last offered FA 2001</td>
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*6-week course **9-week courses

**NEW CURRICULUM**

**PREREQUISITES:**

A&P 130, MICR 200, NRSN 26, NRSN 215, HO 236, HO 237, and NRSN 251, and PSYC 101 or equivalent with grades of Credit or "C" or higher. Successful completion of READ 54, MATH 60, and ENGL 52 or equivalents with grades of Credit or "C" or higher or the college placement test process. Valid California LVN license. Completion of a medication calculation examination with a score of 75% or higher.

**REQUIRED COURSES UNITS**

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<tbody>
<tr>
<td>I</td>
<td>NRSG 230 **Psychosocial and Community Nursing</td>
<td>5</td>
</tr>
<tr>
<td>I</td>
<td>NRSG 232 **Medical-Surgical Nursing 4</td>
<td>5</td>
</tr>
<tr>
<td>II</td>
<td>NRSG 240 **Medical-Surgical Nursing 5</td>
<td>5</td>
</tr>
<tr>
<td>II</td>
<td>NRSG 242 *Professional Role Transition</td>
<td>3</td>
</tr>
</tbody>
</table>

*6-week course **9-week courses

**OPTION D—
LVN-30 UNIT OPTION**

The Nursing Program offers to qualified Licensed Vocational Nurse applicants an opportunity to prepare for registered nurse licensure by completing thirty (30) units of college course work. The LVN who completes the thirty units designated by Cerritos College is eligible for the NCLEX-RN examination for licensure as a registered nurse.
CURRICULUM BEING PHASED OUT
PREREQUISITES:
A&P 130 (formerly A&P 40), MICR 200 (formerly MICR 1) and
NRSG 105 (formerly NRSG 1.5, last offered in SU 2000) or equivalent
with grades of Credit or “C” or higher. Completion of the college place-
ment test process for advisement purposes. Valid California LVN
license. Completion of a medication calculation examination with a
score of 75% or higher.

REQUIRED COURSES
Semester I
+NRSG 2.2 (218)**Psychosocial Community Nursing 3.5
+NRSG 2.1 (219)**Medical-Surgical Nursing IV 5.5
+ last offered SP 2001

Semester II
+NRSG 2.3 (270)**Medical-Surgical Nursing V 5
+NRSG 2.4 (280)*Professional Role Transition 3
+ last offered FA 2001

*6-week course  **9-week courses

NEW CURRICULUM
PREREQUISITES:
A&P 130, MICR 200, HO 236 or HO 237, NRSG 215, and NRSG
26, or equivalent with grades of “C” or higher. Completion of the col-
lege placement test process for advisement purposes. Valid California
LVN license. Completion of a medication calculation examination with a
score of 75% or higher.

REQUIRED COURSES:
Semester 1
NRSG 230 **Psychosocial and Community Nursing 5
NRSG 232 **Medical-Surgical Nursing 4 5

Semester 2
NRSG 240 **Medical-Surgical Nursing V 5
NRSG 242 *Professional Role Transition 3

*6-week course  **9-week courses

OPTION E —
TRANSFER AND CHALLENGE
PREREQUISITES:
A&P 130, MICR 1, HO 152, HO 236, and HO 237, NRSG 26, NRSG
200, NRSG 215, and NRSG 251, and PSYC 101, or equivalent with
grades of Credit or “C” or higher. READ 54, MATH 60 and ENGL 52,
or equivalent with grades of Credit or “C” or higher or the college
placement test process. 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 success-
fully completed academic courses and/or have relevant knowledge
and/or skills acquired in other than an accredited institution will be
given advanced standing in the nursing program upon verification of
such knowledge and/or skills.

TRANSFER CREDIT
A. Credit will be granted for related previous education com-
pleted in:
1. Accredited Vocational or Practical Nursing courses
2. Accredited Registered Nursing courses
3. Accredited Psychiatric Technician courses
4. Armed services nursing courses
5. Certified Nursing Assistant courses
6. Other related courses (e.g., Anatomy and Physiology,
Nutrition)
B. Official transcripts and/or copies of certificates of completion
must be submitted for credit to be granted.
C. Credit will be granted based upon the content and hours of
transferring courses and must be equivalent to courses in the
Cerritos College Nursing Program.

CHALLENGE CREDIT (Competency-based)
A. Credit may be granted for relevant knowledge and/or skills
acquired through prior experience, courses in non-accredited
institutions, and individual study which are essentially
equivalent to a course for which credit is being requested.
B. Credit shall be determined by successful completion of a
comprehensive written examination and/or practical evalua-
tion.
C. Objectives for both the written and/or practical examinations
are made available to the student prior to evaluation.
D. Student must meet the requirements which govern credit by
examination as stated in the college catalog.
E. A minimum of twelve (12) units of the nursing curriculum
must be in residency at Cerritos College in order to receive
the Associate Degree in Nursing.

OPTION F—
BOARD OF REGISTERED NURSING REFERRAL
Applicants for California licensure as registered nurses may be
referred by the Board of Registered Nursing to complete specific areas
of nursing content prior to taking the NCLEX-RN examination. The
Nursing Program offers such applicants the opportunity to complete
nursing preparation as specified by the Board of Registered Nursing.
PREREQUISITES: A valid letter of referral from the
California Board of Registered Nursing for completion of a specified
area. NRSG 27 and 215 or equivalents with grades of Credit or “C” or
higher.

NURSING—RN—640
TRANSFER PROGRAM
LOWER DIVISION MAJOR REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS
California State University - Fullerton
Admission requirements as follows:
Meet requirements for admission to the university as a transfer
student.
Completion of an AA degree in Nursing or its equivalent.
Completion of one college level course in each of the following:
A&P 200, A&P 201 or A&P 130, CHEM 100, MICR 200, PSYC 101,
SOC 101 or ANTH 100.
Completion of one year of satisfactory work experience as a
registered nurse recommended.
### California State University - Los Angeles

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 200</td>
<td>5</td>
</tr>
<tr>
<td>A&amp;P 201</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 100</td>
<td>4</td>
</tr>
<tr>
<td>MICR 200</td>
<td>5</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>3</td>
</tr>
</tbody>
</table>

(The CSULA CHEM 152 requirement must be taken at CSULA. An equivalent course is not available at Cerritos College).

**REGISTERED NURSE STUDENTS NOTE:** "Students who transfer from Community Colleges with an AA Degree in Nursing and the RN are admitted to the upper division Nursing Program at CSULA."

### California State University - Long Beach

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 200</td>
<td>5</td>
</tr>
<tr>
<td>A&amp;P 201</td>
<td>5</td>
</tr>
<tr>
<td>MICR 200</td>
<td>5</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>3</td>
</tr>
</tbody>
</table>

**NOTE:** Because Cerritos College does not offer comparable courses, students should plan to take the required chemistry courses (CHEM 200 and 300) at CSULB. (CHEM 100 at Cerritos College may meet the CHEM 200 requirement if the student passes a competency test at CSULB.)

### University of California - Los Angeles

**UCLA School of Nursing**

The following is a list of courses required to fulfill the UCLA School of nursing prerequisites. Applicants to the UCLA School of Nursing do not need to complete the IGETC requirements.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 200</td>
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</tr>
<tr>
<td>A&amp;P 201</td>
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</tr>
<tr>
<td>BIOL 200</td>
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<tr>
<td>BIOL 201</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 212</td>
<td>5</td>
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<tr>
<td>ENGL 100</td>
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<tr>
<td>ENGL 102</td>
<td>3</td>
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<tr>
<td>MICR 200</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 100</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>3</td>
</tr>
</tbody>
</table>

Selected courses from Literature, The Arts, Philosophy, Language & Linguistic, Culture & Civilization (3 Semester Units).

**NOTE:**
1. Applicants must hold licensure as a Registered Nurse.
2. Applicants must have completed 90 to 105 transferable quarter units (60 to 70 semester units), including 30 units given for ACT exams to enter the school of Nursing.
3. Applicants must have a 3.0 cumulative GPA and a minimum grade of "C" in each prerequisite course.
4. Applicants must have completed the University; American History and Institutions requirements.

**CAREER OPPORTUNITIES:** Baccalaureate program graduates are prepared to function as a professional nurse in the primary care role in a variety of health settings, such as Hospitals, Clinics, Doctor's offices, Jails, and Armed Services.

See State University General Education List.

### ORNAMENTAL HORTICULTURE—686

**CERTIFICATE OF ACHIEVEMENT PROGRAM**

<table>
<thead>
<tr>
<th>Departmental Requirements</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORNH 100</td>
<td>3</td>
</tr>
<tr>
<td>ORNH 110</td>
<td>4</td>
</tr>
<tr>
<td>ORNH 120</td>
<td>4</td>
</tr>
<tr>
<td>ORNH 130</td>
<td>4</td>
</tr>
<tr>
<td>ORNH 150</td>
<td>4</td>
</tr>
<tr>
<td>ORNH 160</td>
<td>4</td>
</tr>
<tr>
<td>ORNH 180</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS** 27

### ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the above requirements for a Certificate of Achievement in Ornamental Horticulture. For an A.A. Degree, a student must take a minimum of six units from ORNH 140, PSYC 101, BA 123, CHEM 110, BOT 120, or BA 107, electives and A.A. Degree general education requirements to achieve a minimum of 60 units.

**RECOMMENDED ELECTIVES:** ORNH 58, ORNH 190.

**CAREER OPPORTUNITIES:** Nursery Industry, parks and recreation departments, nursery supply companies.

See Cerritos College Graduation Requirements.

### ORNAMENTAL HORTICULTURE

**LANDSCAPE DESIGN AND MAINTENANCE—687 CERTIFICATE OF ACHIEVEMENT**

<table>
<thead>
<tr>
<th>Departmental Requirements</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 110</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 122</td>
<td>2</td>
</tr>
<tr>
<td>ORNH 50</td>
<td>1.5</td>
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<td>ORNH 100</td>
<td>3</td>
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<tr>
<td>ORNH 110</td>
<td>4</td>
</tr>
<tr>
<td>ORNH 120</td>
<td>4</td>
</tr>
<tr>
<td>ORNH 130</td>
<td>4</td>
</tr>
<tr>
<td>ORNH 180</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS** 25.5

**RECOMMENDED ELECTIVES:** BA 53, BUSA 100.

### ORNAMENTAL HORTICULTURE

**LANDSCAPE MANAGEMENT—688 CERTIFICATE OF ACHIEVEMENT**

<table>
<thead>
<tr>
<th>Departmental Requirements</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORNH 50</td>
<td>1.5</td>
</tr>
<tr>
<td>ORNH 51</td>
<td>1.5</td>
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<tr>
<td>ORNH 52</td>
<td>1.5</td>
</tr>
<tr>
<td>ORNH 53</td>
<td>1.5</td>
</tr>
</tbody>
</table>

135
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORNH 54</td>
<td>Landscape Contracting Management</td>
<td>1.5</td>
</tr>
<tr>
<td>ORNH 55</td>
<td>Landscape Contracting Operations</td>
<td>1.5</td>
</tr>
<tr>
<td>ORNH 100</td>
<td>Introduction to Ornamental Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>ORNH 110</td>
<td>Soils</td>
<td>4</td>
</tr>
<tr>
<td>ORNH 120</td>
<td>Ornamental Trees</td>
<td>4</td>
</tr>
<tr>
<td>ORNH 130</td>
<td>Ornamental Shrubs</td>
<td>4</td>
</tr>
<tr>
<td>ORNH 150</td>
<td>TurfGrass Management and Ground Covers</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL UNITS REQUIRED:** 28

**RECOMMENDED ELECTIVES:** DRAF 131, ER 16.

### ORNAMENTAL HORTICULTURE

#### FLORAL DESIGN—689

**CERTIFICATE OF ACHIEVEMENT**

**DEPARTMENTAL REQUIREMENTS (25 Units)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORNH 58</td>
<td>Interior Plantscapes</td>
<td>2</td>
</tr>
<tr>
<td>ORNH 59</td>
<td>Basic Floral Design</td>
<td>2</td>
</tr>
<tr>
<td>ORNH 60</td>
<td>Advanced Floral Design</td>
<td>2</td>
</tr>
<tr>
<td>ORNH 61A</td>
<td>Special Occasions Floral Design I</td>
<td>2</td>
</tr>
<tr>
<td>ORNH 61B</td>
<td>Special Occasions Floral Design II</td>
<td>2</td>
</tr>
<tr>
<td>ORNH 62B</td>
<td>Wedding Floral Design I</td>
<td>2</td>
</tr>
<tr>
<td>ORNH 62C</td>
<td>Wedding Floral Design II</td>
<td>2</td>
</tr>
<tr>
<td>ORNH 63</td>
<td>Integrated Floral Design</td>
<td>1</td>
</tr>
<tr>
<td>ORNH 64</td>
<td>Floral Design for Funerals</td>
<td>1</td>
</tr>
<tr>
<td>ORNH 100</td>
<td>Introduction to Ornamental Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>BUSA 100</td>
<td>Introduction to Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BA 53</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS REQUIRED:** 25

This program is designed to provide practical training to enable students to secure employment as floral designers. The course offerings extend from entry level floral designing to a variety of advanced floral design courses. Also included are courses which will prepare the student to become a manager or owner of a floral shop.

### 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:

**UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 40L</td>
<td>Pharmacy Clerk Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 45</td>
<td>Retail Products for Pharmacy Clerks</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 47</td>
<td>Pharmacy Clerk Clinical Experience</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 60</td>
<td>Introduction to Pharmacy</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 61</td>
<td>Pharmacy Skills Development</td>
<td>1</td>
</tr>
<tr>
<td>MATH 20</td>
<td>Basic Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>*BCOT 62</td>
<td>Microcomputer Keyboarding</td>
<td>1</td>
</tr>
<tr>
<td>OR *BCOT 135</td>
<td>Typewriting Speed/Control Building</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total Units Required:** 11

*Students who provide documented ability to type 35 wpm or more may choose to waive the keyboarding requirement.

#### PHARMACY TECHNICIAN—920

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.

### ADMISSION PROCEDURES AND REQUIREMENTS

1. **Academic Requirements**
   a. High School graduate or equivalent.
   b. Acceptable scores on the College Placement Tests for Writing, Mathematics, and Reading clearance or deficiencies removed.

2. **Writing Proficiency Requirement:**
   Completion of ENGL 52 with a grade of Credit or "C" or higher, or completion of ENGL 1.

3. **Mathematics Proficiency Requirements:**
   This requirement can be met by one of the following options.
   (1) Earn a score on the Basic Math Readiness test sufficient for placement in a course above the level of MATH 40 or
   (2) Completion of MATH 40, CIS 58, TM 50 with a grade of Credit or "C" or higher, or
   (3) For other options see your counselor.

4. **Reading Proficiency Requirement:**
   (1) The reading proficiency requirement is demonstrated by successfully completing the Reading Proficiency Test at the 12th grade level. The Reading Proficiency Test may be taken no more than once each semester.
   (2) The reading proficiency requirement may be met by completing READ 54 with a grade of Credit or "C" or higher.
   (3) For other options see your counselor.

### READING PROFICIENCY REQUIREMENTS

1. **Academic Requirements**
   a. High School graduate or equivalent.
   b. Acceptable scores on the College Placement Tests for Writing, Mathematics, and Reading clearance or deficiencies removed.

2. **Mathematics Proficiency Requirements:**
   This requirement can be met by one of the following options.
   (1) Earn a score on the Basic Math Readiness test sufficient for placement in a course above the level of MATH 40 or
   (2) Completion of MATH 40, CIS 58, TM 50 with a grade of Credit or "C" or higher, or
   (3) For other options see your counselor.

3. **Reading Proficiency Requirement:**
   (1) The reading proficiency requirement is demonstrated by successfully completing the Reading Proficiency Test at the 12th grade level. The Reading Proficiency Test may be taken no more than once each semester.
   (2) The reading proficiency requirement may be met by completing READ 54 with a grade of Credit or "C" or higher.
   (3) For other options see your counselor.

4. **Other options see your counselor.

   a. A&P 120 or equivalent course with a grade of Credit or "C" or higher is recommended prior to enrolling for the Pharmacology courses. (PHAR 83 and PHAR 85)
   b. All deficiencies in academic requirements must be removed. An overall grade point average of 2.0 must be attained prior to admission to the Pharmacy Technician Program.
   c. A&P 120 or equivalent course with a grade of Credit or "C" or higher is recommended prior to enrolling for the Pharmacology courses. (PHAR 83 and PHAR 85)
   d. All deficiencies in academic requirements must be removed. An overall grade point average of 2.0 must be attained prior to admission to the Pharmacy Technician Program.

2. **Health**
   a. 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.

SELECTION PROCEDURES

Academic Evaluation
1. All required documents, including transcripts, test scores, and work-in-progress reports must be in the Health Occupations Division Office by October 1 for Fall admission to PHAR 62 or by February 15 for Spring admission to PHAR 62.
2. No student whose college grade point average is below 2.0, or who has not cleared Writing, Math, or Reading deficiencies can be considered. These are considered minimum standards of academic preparation.
3. Additional consideration will be given for work experience in the field of pharmacy technician or related area, and for students who have completed additional science classes.

EXPENSES
Students are expected to purchase a student body card. Enrollment fees, project fees, uniforms, books, and supplies will cost approximately $800.00. 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. Uniforms are required in all lab classes and name tags are required in all classes.

PROCEDURE FOR APPLICATION
(To be completed in order as listed)
1. Complete application to the program. An application may be obtained in either the Health Occupations Division Office, 860-2451 extension 2550, or Counseling Office, extension 2231; or by sending a self-addressed, stamped envelope to: Pharmacy Technician Program, Cerritos College, 11110 Alondra Blvd., Norwalk, CA 90650. The application must be returned by October 1 for Fall admission (current semester) or February 15 for Spring admission (current semester).
2. Submit proof of High School graduation or equivalent.
3. Submit an official transcript of all college work to the Admissions and Records Office and a copy to the Health Occupations Division. A "work-in-progress" must be submitted for all prerequisites in progress at the time of application.
4. Submit assessment test scores for English, Reading, and Math with your application by October 1 or February 15. If you have not taken these tests, proof of clearance by course work or test scores to submit, apply to Cerritos College, obtain a student number, take the assessment test battery at the Assessment Center and record your test date on your program application.
5. It is advised that you make an appointment with a counselor to review test scores and college work. To make an appointment with a counselor, call (562) 860-2451, extension 2231.
6. You will be notified of acceptance or non-acceptance after applications are reviewed.
7. If you are accepted into the Pharmacy Technician Program, you must obtain a valid CPR card for Basic Life Support (Course Level "C" or C.P.R. for health care providers), offered through the Heart Association or the American Red Cross prior to the first clinical experience.

**The program has made every reasonable effort to determine that everything stated in the information sheet is accurate. Matters contained herein, are subject to change without notice by the administration of the department for reasons related to student enrollment, level of financial support or for any reason at the discretion of the Program. The Program further reserves the right to add, amend, or repeal any of the rules, regulations, policies and procedures, consistent with applicable laws.

CERTIFICATE OF ACHIEVEMENT

REQUIREDS COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO 56</td>
<td>Medication Calculations</td>
</tr>
<tr>
<td>PHAR 50</td>
<td>Pharmacetics</td>
</tr>
<tr>
<td>PHAR 60</td>
<td>Introduction to Pharmacy</td>
</tr>
<tr>
<td>PHAR 61</td>
<td>Pharmacy Skills Development</td>
</tr>
<tr>
<td>PHAR 62</td>
<td>Pharmacy Operations I</td>
</tr>
<tr>
<td>PHAR 63</td>
<td>Pharmacy Operations II</td>
</tr>
<tr>
<td>PHAR 64</td>
<td>Pharmacy Operations III</td>
</tr>
<tr>
<td>PHAR 81</td>
<td>Over-The-Counter Products</td>
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<tr>
<td>PHAR 83</td>
<td>Pharmacy Technician Pharmacology I</td>
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<td>PHAR 85</td>
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<tr>
<td>PHAR 90</td>
<td>Clinical Experience I</td>
</tr>
<tr>
<td>PHAR 95</td>
<td>Clinical Experience II</td>
</tr>
<tr>
<td>MA 161</td>
<td>Medical Terminology</td>
</tr>
<tr>
<td>PHAR 73/74-</td>
<td>Pharmacy Technician Occupational Work Experience</td>
</tr>
<tr>
<td>BCOT 62</td>
<td>Microcomputer Keyboarding</td>
</tr>
<tr>
<td>OR BCOT 135</td>
<td>Typewriting Speed/Control Building</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS 32.0

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Pharmacy Technician. For an A.A. Degree, a student must also take CIS 101, 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 pharmacist in the performance of assigned duties.

See Cerritos College Graduation Requirements.

PHILOSOPHY — 570

TRANSFER PROGRAM

LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC SCHOOLS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>PHIL 100</td>
<td>Introduction to Philosophy</td>
</tr>
<tr>
<td>PHIL 106</td>
<td>Introduction to Logic</td>
</tr>
</tbody>
</table>

California State University - Fullerton

CAREER OPPORTUNITIES: Employment as a Pharmacy Technician in community or hospital pharmacy assisting registered pharmacist in the performance of assigned duties.

See Cerritos College Graduation Requirements.
### Curricula, Requirements for Majors, Certificates and Transfer Programs

#### California State University - Long Beach
- PHIL 100 Introduction to Philosophy 3

#### California State University - Los Angeles
- PHIL 100 Introduction to Philosophy 3

#### University of California - Irvine
At least one course from each area, A-D:
- A) ENGL 100 Freshman Composition 3
  - ENGL 102 Freshman Composition and Literature 3
  - ENGL 103 Critical and Argumentative Writing 3
- B) ENGL 230A Introduction to American Literature 3
  - ENGL 230B Introduction to American Literature 3
  - ENGL 246A Survey of English Literature 3
  - ENGL 246B Survey of English Literature 3
  - ENGL 248A Masterpieces of World Literature 3
  - ENGL 248B Masterpieces of World Literature 3
- C) HIST 240 Western Civilization 3
  - HIST 241 Western Civilization 3
- D) PHIL 100 Introduction to Philosophy 3

#### ADDITIONAL REQUIREMENTS:
- FREN 202 Intermediate French 4
- OR GERM 202 Intermediate German (4)
- OR JAPN 202 Intermediate Japanese (4)
- OR SPAN 202 Intermediate Spanish (4)

#### University of California - Los Angeles
- PHIL 102 Introduction to Ethics 3
- OR PHIL 106 Introduction to Logic 3

#### ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete the above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all AA degree general education requirements for a total of at least 60 units.

#### CAREER OPPORTUNITIES:
The philosophy major is intended for students who plan to teach philosophy, for pre-professional students in such areas as theology, law, and as a foundation for graduate studies in the areas of library science, social science, diplomacy, theoretical physical science, and specialized historical studies.

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

### PHOTOGRAPHY—150

#### TRANSFER PROGRAM

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

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DEPARTMENT</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>PHOT 100</td>
<td>Introduction to Photography</td>
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</table>

Neither the California State University nor the University of California offer a degree in Photography. Various photography options however are available at some California State University campuses.

#### California State University - Fullerton
Photo-Communications may be selected as a concentration in the Communications major and Creative Photography is an available concentration in the Art major.

#### California State University - Long Beach
Photo-Journalism may be selected as an option in the Journalism major and Art Photography is an available option in the Art major. See the Fine Arts counselor for further information.
ASSOCIATE IN ARTS DEGREE:
Complete the above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all AA degree general education requirements for a total of at least 60 units.

Recommended Electives: PHOT 102, 122, 160, 200, 234, 240, JOUR 100, 101, and 130

CAREER OPPORTUNITIES: Photographer for newspapers; magazines; advertising; scientific research; graphic design; studio and photographic laboratories; teaching.

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

PHYSICAL EDUCATION

ATHLETIC TRAINER AIDE— 411
CERTIFICATE OF ACHIEVEMENT

DEPARTMENT REQUIREMENTS: UNITS
HED 110 Community First Aid and CPR 3
PE 107 Introduction to Athletic Training 3
PE 141 Fitness and Wellness 3
PE 254 Measurement and Interpretation of Fitness 3
PE 255 Programs and Principles of Conditioning 3
PE 260 Athletic Injury Assessment and Reconditioning 3
PE 261 Athletic Injury Taping, Bandaging & Immobilization 3
MA 161 Medical Terminology 3
A&P 120* Introduction to Human Anatomy & Physiology 4
Or A&P 130* Human Anatomy & Physiology 5
*(A&P 200 & A&P 201 recommended for transfer students)

TOTAL CERTIFICATE UNITS 25/26

FITNESS SPECIALIST— 401
CERTIFICATE OF ACHIEVEMENT

DEPARTMENT REQUIREMENTS: UNITS
HED 110 Community First Aid and CPR 3
HED 200 Food For Fitness and the Athlete 3
PE 107 Introduction to Athletic Training 3
PE 141 Fitness and Wellness 3
PE 254 Measurement and Interpretation of Fitness 3
PE 255 Programs and Principles of Conditioning 3
A&P 120* Introduction to Human Anatomy & Physiology 4
Or A&P 130* Human Anatomy & Physiology 5
BA 100 Fundamentals of Business 3
*(A&P 200 & A&P 201 recommended for transfer students)

TOTAL CERTIFICATE UNITS 25/26

PHYSICAL EDUCATION

MEN— 410
WOMEN— 405

TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION
FOR THE CALIFORNIA STATE UNIVERSITY

HED 110 Community First Aid and CPR 3
PE 100 Introduction to Physical Education and Sport 2

DIVISION REQUIREMENTS (10 UNITS)

Pre-professional Theory
PE 101 Sports Officiating (For Men's Activities I) 2
PE 102 Sports Officiating (For Men's Activities II) 2
PE 103 Sports Officiating (For Women's Activities I) 2
PE 104 Sports Officiating (For Women's Activities II) 2

Pre-professional Activities
PE 108 Professional Activities (For Men's Sports I) 3
PE 110 Professional Activities (For Men's Sports II) 3
PE 117 Professional Activities (For Women's Sports I) 3
PE 118 Professional Activities (For Women's Sports II) 3

LOWER DIVISION MAJOR REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Dominguez Hills
A&P 130 Human Anatomy and Physiology 5
PE 100 Introduction to Physical Education 2
See a counselor for additional option requirements.
Options available are Athletic Training Pre-Professional, Athletic Training certificate, Dance Concentration, Fitness Director and Teaching.

California State University - Fullerton
KINESIOLOGY MAJOR
Select six (6) units from the following:
PE 131 Walking for Fitness 1
PE 141 Fitness and Wellness 3
PE 143 Personal Fitness Program 1
PE 132A Aerobic Activities (Low Impact) 2
PE 132B Aerobic Activities II 2
PE 155A Bowling, Beginning 1
PE 155B Bowling, Intermediate/Advance 1
PE 156A Golf: Beginning 1
PE 156B Golf: Advanced Stroke Development and Course Play 2
PE 156C Golf: Intermediate/Advanced 2


California State University - Long Beach
KINESIOLOGY MAJOR
A&P 200 Human Anatomy 5
A&P 201 Human Physiology 5
PE 141 Fitness and Wellness 3
PE 155A Golf: Beginning 1
PE 155B Golf: Intermediate/Advanced 2
PE 159A Tennis, Beginning 1
California State University - Northridge

KINESIOLOGY MAJOR

BIOL 120  Introduction to Biological Science  4
A&P 200  Human Anatomy  5
A&P 201  Human Physiology  5
Additional Requirements:
   Exercise Science Option
   CHEM 110  Elementary Chemistry  4
   PHYS 101  General Physics  4
   Athletic Training Option
   HO 152  Normal and Therapeutic Nutrition  3
   HED 100  Contemporary Health Problems  3


Complete above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all AA degree general education requirements for a total of at least 60 units.

CAREER OPPORTUNITIES: Coach, fitness director YMCA and YWCA, outdoor education programs, instructor in private and public camps, rehabilitation centers, teacher/athletic trainer, sports medicine clinics, sports education, community, county, state recreation departments, credential teacher (elementary or secondary).

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

PHYSICAL THERAPIST ASSISTANT PROGRAM – 930

ASSOCIATE IN ARTS DEGREE

The Physical Therapist Assistant is a skilled technical health worker who performs physical therapy modalities and procedures under the direction of a Physical Therapist. This program is accredited by the Commission on Accreditation in Physical Therapy Education - American Physical Therapy Association. Successful completion of the Physical Therapist Assistant Program and Associate in Arts Degree qualifies one to take the State of California Examination for Physical Therapist Assistants.

LENGTH AND KIND OF PROGRAM

The program is four semesters in length. General education and Physical Therapist Assistant classes are scheduled on the college campus. Correlated clinical experiences begin the second semester and continue throughout the program. These experiences take place at selected hospitals and clinics in Los Angeles, Orange, Riverside, and San Bernardino Counties.

ADMISSION PROCEDURES AND REQUIREMENTS

1. Academic Requirements
   a. Acceptable scores on College Placement Tests for English and Mathematics and Reading clearance or deficiencies removed
   b. A&P 130 with a grade 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 course.

   Applicants who have not completed 1b and 1c will not be considered for admission.

2. Health
   a. Applicants must present evidence of physical fitness and ability to perform tasks required of a Physical Therapist Assistant. Lab, x-rays and immunization records meeting hospital standards must be completed after acceptance into the program.

   b. No student whose college grade point average is below 2.0, or who has not cleared English, Math, or Reading deficiencies can be considered. These are considered minimum standards of academic preparation.

   c. Additional consideration will be given for work experience in the field of physical therapy or related areas, and for students who have completed additional medical or science related classes.

EXPENSES

Students are expected to purchase a student body card. Enrollment fees, project fees, uniforms, books, and supplies which will cost approximately $1000.

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 an "A" or higher in each required and general education course. Uniforms are required in all hospital lab classes (PTA 126L, 236L, 246L).

PROCEDURE FOR APPLICATION

(To be completed in order as listed)

1. Complete application to the program. This can be obtained in either the Health Occupations Division (562) 860-2451, Ext.2550, or Counseling Office, Ext.2231. The application must be returned by April 15.

2. Submit two official transcripts of all college work. Submit one copy to the Health Occupations Division and one copy to the Admissions and Records Office.

3. Submit assessment test scores for English, Reading, and Math with your application by April 15. If you have not taken these tests, proof of clearance by course work must appear on your college transcript. If you do not have course work or test scores to submit, apply to Cerritos College, obtain a student number, take the assessment test battery at the Assessment Center and record your test date on your program application.
by April 15.
4. It is advised that you make an appointment with a counselor
to review test scores and college work. To make an appoint-
ment 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. However, if you are completing admission require-
ments 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 Basic Life
Support Course Level "C", offered through the Heart
Association or the American Red Cross prior to the first hos-
pital experience (PTA 126). Card must be valid throughout
the program.

ASSOCIATE IN ARTS DEGREE
A total of 71 units including the following requirements must be
completed to qualify for the A.A. Degree:
A&P 130 Human Anatomy and Physiology 5
ENG 100 Freshman Composition 3
MA 161 Medical Terminology 3
PSYC 101 General Introductory Psychology 3
SPCH 100 Oral Communication 3
OR SPCH 130 Fundamentals of Speaking 3
Natural Sciences and/or Health Education 3 units
Two additional courses from the Social and
Behavior Sciences 6 units
Humanities and Fine Arts 6 units

FIRST YEAR
First Semester
PTA 110 Introduction to Physical Therapy 4
PTA 120 Kinesiology 4

Second Semester
PTA 125 Pathology 3
PTA 126L Clinical Practicum I 4
PTA 128- Physical Therapy Aspects of Growth, Development,
and Aging 3
PTA 235 Neurology 3

SECOND YEAR
First Semester
PTA 230 Therapeutic Exercise 4
PTA 233 Prosthetics and Orthotics for Allied Health
Professionals 2
PTA 236L Clinical Practicum II 4

Second Semester
PTA 240 Activities of Daily Living 2
PTA 245 Advanced Modalities 3
PTA 246L- Clinical Affiliation 4

See Cerritos College Graduation Requirements.

PHYSICAL THERAPY— 665
TRANSFER PROGRAM
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 in order to apply. Also, strong preparation in Biology, Chemistry, Physics, Anatomy and Physiology is recommended.

California State University - Northridge

California State University - Fresno
As of Fall 1997, CSU Fresno offers Physical Therapy as a Master's Program only. Applicants must have a BS/BA degree in a related field in order to apply.

Application for Admission to the departments of Physical Therapy must be made well in advance to assure entrance after the lower division requirements have been made.

CAREER OPPORTUNITIES: Physical therapists help persons with various diseases or injuries to overcome their disabilities. They are members of a rehabilitation team, which is directed by a physician. Although qualified physical therapists may treat many types of patients, some specialize in caring for children or for patients with arthritis, amputations or paralysis. Successful completion of a Bachelor or Master’s Degree qualifies one to take the State of California examination to practice as a Physical Therapist.

See State University Colleges General Education List.

PHYSICS— 635
TRANSFER PROGRAM
COMMON LOWER DIVISION PREPARATION
FOR THE CALIFORNIA STATE UNIVERSITY
AND UNIVERSITY OF CALIFORNIA
UNITS
PHYS 100 Elementary Physics 4
PHYS 201 Engineering Physics 4
PHYS 202 Engineering Physics 4
PHYS 203 Engineering Physics 4

California State University - Dominguez Hills
CHEM 111 General Chemistry 5
MATH 170 Analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4
MATH 220 Analytic Geometry and Calculus III 4

California State University - Long Beach
BIOL 120 Introduction to Biological Science 4
CHEM 111 General Chemistry 5
CHEM 112 General Chemistry 5
MATH 170 Analytic Geometry and Calculus I 4

141
MATH 190  Analytic Geometry and Calculus II  4
MATH 220  Analytical Geometry and Calculus III  4

California State University - Fullerton
CHEM 111  General Chemistry  5
CHEM 112  General Chemistry  5
MATH 170  Analytic Geometry and Calculus I  4
MATH 190  Analytic Geometry and Calculus II  4
MATH 220  Analytic Geometry and Calculus III  4

California State University - Los Angeles
CHEM 111  General Chemistry  5
CHEM 112  General Chemistry  5
MATH 170  Analytic Geometry and Calculus I  4
MATH 190  Analytic Geometry and Calculus II  4
MATH 220  Analytic Geometry and Calculus III  4

California State Polytechnic University - Pomona
CHEM 111  General Chemistry  5
CHEM 112  General Chemistry  5
CIS 178  Programming in Fortran  3
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
MATH 240  Calculus and Differential Equations  4

University of California - Irvine
CIS 180  Programming in C/C++  3
OR CIS 280  Object-Oriented Programming in 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
MATH 240  Calculus and Differential Equations  4

Recommended Courses:
CHEM 111  General Chemistry  5
CHEM 112  General Chemistry  5
See counselor for specific concentration requirements.

University of California - Los Angeles
CHEM 111  General Chemistry  5
CHEM 112  General Chemistry  5
MATH 170  Analytic Geometry and Calculus I  4
MATH 190  Analytic Geometry and Calculus II  4
MATH 220  Analytic Geometry and Calculus III  4
MATH 240  Calculus and Differential Equations  4

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete 60 units to include (1) the common lower division requirements and (2) the Associate in Arts Degree general education requirements.

CAREER OPPORTUNITIES: After transfer to a four-year university and completion of the Bachelor's Degree Program, graduates qualify for graduate study and for a career as a professional Physicist, positions in an industrial laboratory and teaching of Physics and the Physical science.

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

PLASTICS MANUFACTURING TECHNOLOGY (PMT) SPECIALTY REQUIREMENTS
In order to obtain a Plastics Specialty, the student is encouraged to complete the required units for the Plastics Manufacturing Technology degree. The five to seven units for the specialty may come from the units completed toward the degree or from additional courses outlined below. Students with previous coursework may also be considered for certificates upon providing transcripts for review, and consent of the department.

Plastics Manufacturing Technology Specialty
PMT 63L  Specialty Plastics Lab  .5
PMT 68-  Plastics Materials & Processes  2.5
PMT 100  Plastics I  2.5

Inspection and Testing Specialty
PMT 63L  Specialty Plastics Lab  .5
PMT 100  Plastics I  2.5
MET 120  Nondestructive Testing  3

Injection Molding Specialty
PMT 59  Injection Molding I  2.5
PMT 63L  Specialty Plastics Lab  .5
PMT 100  Plastics I  2.5

Injection Molding Specialty
PMT 59  Injection Molding I  2.5
PMT 63L  Specialty Plastics Lab  .5
PMT 65  Moldmaking  3

Injection Molding Specialty
PMT 59  Injection Molding I  2.5
PMT 63L  Specialty Plastics Lab  .5
PMT 65  Moldmaking  3

Fiberglass Speciality
PMT 61  Fiberglass I  2.5
PMT 67  Fiberglass II  2.5

Fiberglass Speciality
PMT 61  Fiberglass I  2.5
PMT 67  Fiberglass II  2.5
PMT 70  Composites Technology  2.5

Fiberglass/Composite Repair Specialty
PMT 53  Composite Repair  3
PMT 61  Fiberglass I  2.5
PMT 67  Fiberglass II  2.5

Tooling Specialty
PMT 63L  Specialty Plastics Lab  .5
PMT 72  Tooling for Plastics  2.5
PMT 221  Tooling for Plastics  2.5

Tooling Specialty
PMT 63L  Specialty Plastics Lab  .5
PMT 72  Tooling for Plastics  2.5
PMT 221  Tooling for Plastics  2.5

Tooling Specialty
PMT 63L  Specialty Plastics Lab  .5
PMT 72  Tooling for Plastics  2.5
PMT 221  Tooling for Plastics  2.5
PLASTICS/COMPOSITES MANUFACTURING TECHNOLOGY—871

CERTIFICATE OF ACHIEVEMENT PROGRAM

CORE

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<td>BCOM 147</td>
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<td>BCOM 148</td>
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COMPOSITES MANUFACTURING OPTION—872

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<td>PMT 70</td>
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<td>DRAF 16</td>
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Total Units (including CORE) 24

COMPOSITE INSPECTION OPTION—873

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<td>MET 68</td>
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<td>MET 120</td>
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Total Units (including CORE) 25

PLASTICS/COMPOSITE TOOL DESIGN OPTION—874

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<td>DRAF 258</td>
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<td>ENGR 123</td>
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Total Units (including CORE) 28

PLASTICS MANUFACTURING OPTION—875

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<td>2.5</td>
</tr>
<tr>
<td>PMT 72</td>
<td>2.5</td>
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</tbody>
</table>

Total Units (including CORE) 33

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete 60 units to include: (1) the above requirements for a specific Certificate of Achievement, (2) DRAF 16, (for Composite Manufacturing, Composite Inspection and Plastics Manufacturing Options Only), (3) the Associate of Arts Degree general education requirements, and (4) electives as needed.

RECOMMENDED ELECTIVES: PMT 98-99 (Directed Studies)

CAREER OPPORTUNITIES: Upon completion of the program, a student is prepared to work in areas of injection, compression and extrusion molding, mold laminating, plastic mold design and fabrication, as well as testing equipment set up, maintenance, and tooling.

See Cerritos College Graduation Requirements.

POLITICAL SCIENCE—770

TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION

FOR THE CALIFORNIA STATE UNIVERSITY

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<th>UNIVERSITY</th>
<th>COURSE</th>
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<td>University of California - Los Angeles</td>
<td>MATH 112 Elementary Statistics</td>
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<td>POL 220 Comparative Government</td>
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<tr>
<td></td>
<td>OR POL 101 American Political Institutions</td>
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<tr>
<td></td>
<td>POL 220 Comparative Government</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>POL 210 International Relations</td>
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University of California - Irvine

<table>
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<tr>
<th>UNIVERSITY</th>
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<tr>
<td></td>
<td>CIS 280 Object-Oriented Programming in C++</td>
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<tr>
<td></td>
<td>MATH 170 Analytic Geometry and Calculus I</td>
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<tr>
<td></td>
<td>MATH 190 Analytic Geometry and Calculus II</td>
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<tr>
<td></td>
<td>TWO COURSES FROM:</td>
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<tr>
<td></td>
<td>POL 201 Introduction to Political Science and American Government</td>
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<td></td>
<td>POL 210 International Relations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>POL 230 Contemporary Political Issues: Middle East</td>
<td>3</td>
</tr>
</tbody>
</table>

One additional course from the Political Science courses above or in another Social Science, (See a counselor for choices).

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete the above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all AA degree general education requirements for a total of at least 60 units.

CAREER OPPORTUNITIES: Diversified positions in government at the local, state, and federal levels, military, Foreign Service, private business and industry, upper division work leads into advanced degrees in law, journalism, public administration, international relations.

See Cerritos College Graduation Requirements.

See State University General Education List.
PRE-CIROPRACTIC—650
TRANSFER PROGRAM

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 specific prerequisite courses must be completed with at least a "C" grade, and the overall grade-point-average must be at least 2.5 on a 4.0 scale.

MINIMUM COURSE REQUIREMENTS FOR ALL CHIROPRACTIC SCHOOLS MUST INCLUDE
THE FOLLOWING:

- CHEM 111 General Chemistry 5
- CHEM 112 General Chemistry 5
- CHEM 211 Organic Chemistry 5
- CHEM 212 Organic Chemistry 5
- ENGL 100 Freshman Composition 3
- SPCH 100 Fundamentals of Speech 3
- PHYS 101 General Physics 4
- PHYS 102 General Physics 4
- PSYC 101 General Introductory 3

ADDITIONAL REQUIREMENTS FOR SPECIFIC INSTITUTIONS:
The below mentioned requirements are subject to change without notice. To assure accuracy consult the school of your choice.

Southern California University of Health and Sciences (www.scuhs.edu)
Formerly Los Angeles College of Chiropractic
Applicants must have completed 85 semester units.
- A&P 200 Human Anatomy 5
- A&P 201 Human Physiology 5
- BIOL 200 Principles of Biology 5
- BIOL 201 Principles of Biology 5
- MICRO 200 Principles of Microbiology 5
- Additional General Education Courses (Social Sciences, Fine Arts and Humanities) 15

Cleveland Chiropractic College of Los Angeles (www.clevelandchiropractic.edu)
Applicants must have completed a minimum of 60 semester units. Candidates with Baccalaureate degrees receive preference for admission.
- A&P 200 Human Anatomy 5
- A&P 201 Human Physiology 5
- BIOL 200 Principles of Biology 5
- BIOL 201 Principles of Biology 5
- MICRO 200 Principles of Microbiology 5
- Additional Social Sciences and Humanities 15

CAREER OPPORTUNITIES: Doctor of Chiropractic; Primary health care provider, educated to diagnose, care for the human body in health and disease and to consult with, or refer to other health care providers.

PRE-MEDICAL—652
TRANSFER PROGRAM

Admission to most schools of medicine is based primarily on the candidate's Academic achievement in a college program and performance on the Medical College Admission Test. Although most medical schools at present require a minimum of three years of undergraduate college work, the majority of entering medical students has obtained the Bachelor's degree. 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 fields, integrating into the major program the course requirements for medical school.

PRE-DENTAL—651
TRANSFER PROGRAM

Admission to most schools of Dentistry is based primarily on the candidate's academic achievement in a college program and performance in the Dental Admissions Test (DAT). Because most of the applicants being admitted to Dental schools possess a Bachelor's degree, students are advised to integrate the dental school requirements into a program that will lead to a Bachelor's degree in a major of their choice.

MINIMUM COURSE REQUIREMENTS FOR MOST DENTAL SCHOOLS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>BIO 200 Principles of Biology</td>
<td>5</td>
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<tr>
<td>BIO 201 Principles of Biology</td>
<td>5</td>
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<tr>
<td>CHEM 111 General Chemistry</td>
<td>5</td>
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<tr>
<td>CHEM 122 General Chemistry</td>
<td>5</td>
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<tr>
<td>CHEM 211 Organic Chemistry</td>
<td>5</td>
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<tr>
<td>CHEM 212 Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 100 Freshman Composition</td>
<td>3</td>
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<tr>
<td>ENGL 102 Freshman Composition and Literature</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 101 General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102 General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 101 General Introductory</td>
<td>3</td>
</tr>
</tbody>
</table>

- Psychology 101, General Introductory Psychology: required by many Dental Schools.

MATHEMATICS: The amount of mathematics beyond trigonometry needed will be determined by the upper division course of study the student elects to pursue.

ELECTIVES: Choose those courses from the area of general education outside the major which will represent a broad Liberal Arts education and which, if necessary, may apply toward the Bachelor's degree requirement at the transfer school.

For information about specific Dental School requirements, students are encouraged to consult "Admission Requirements of American Requirements of American Dental Schools," a catalog available from the American Association of Dental Schools, 1625 Massachusetts Ave., N.W. Washington, D.C.20036 (Attn: Publications Assistant).

For accurate programming and more detailed information concerning the above requirements as well as the programs of other schools of dentistry, consult with the Cerritos College pre-dental counselor.

CAREER OPPORTUNITIES: The dental profession offers a variety of career options – General dentistry or one of eight recognized specialties: Dental Public Health, Endodontics, Oral Pathology, Oral Surgery, Orthodontics, Pedantic, Periodontics and Prosthodontics.
COURSE REQUIREMENTS FOR MOST MEDICAL SCHOOLS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>BIOL 120 Introduction to Biological Science</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 200 Principles of Biology</td>
<td>5</td>
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<tr>
<td>BIOL 201 Principles of Biology</td>
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<tr>
<td>CHEM 111 General Chemistry</td>
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<td>CHEM 112 General Chemistry</td>
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<td>CHEM 205 Quantitative Analysis</td>
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<td>CHEM 212 Organic Chemistry</td>
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<td>ENGL 100 Freshman Composition</td>
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<td>ENGL 102 Freshman Composition &amp; Literature</td>
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<tr>
<td>PHYS 101 General Physics</td>
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<td>PHYS 102 General Physics</td>
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<td>CHEM 211 Organic Chemistry</td>
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<td>ENGL 102 Freshman Composition &amp; Literature</td>
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<tr>
<td>PHYS 101 General Physics</td>
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<tr>
<td>PHYS 102 General Physics</td>
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</tbody>
</table>

MATHEMATICS: Trends in medical education require the medical student to be adequately trained in mathematics; since calculus is needed in several medical school courses, introduction to calculus is strongly recommended and, in some instances, required.

The upper division major will further define mathematical requirements.

ELECTIVES: Choose those courses from the area of general education outside the major which will represent a broad liberal arts education and which, if necessary, may apply toward the bachelor of arts degree requirement at the transfer school.

For more detailed information concerning the above requirements and the programs of other schools of optometry, consult with the Cerritos College pre-optometry counselor.

CAREER OPPORTUNITIES: An Optometrist or Doctor of Optometry (O.D.) is specifically trained and state licensed to examine, diagnose, and treat conditions of the vision system. They prescribe optometry treatment such as corrective lenses, contact lenses, or visual therapy.

PRE-PHARMACY—649
TRANSFER PROGRAM

Admissions to schools of pharmacy offering the Doctor of Pharmacy generally requires the completion of a minimum of 60 semester units of pre-pharmacy course work. Schools offering a Bachelor of Science in Pharmacy required a minimum of 30 semester units of pre-professional preparation. (See, for example, University of Pacific, Washington State University, University of Wyoming, University of Arizona).

COURSE REQUIREMENTS FOR MOST PHARMACY SCHOOLS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>BIOL 200 Principles of Biology</td>
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<td>BIOL 201 Principles of Biology</td>
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<td>CHEM 111 General Chemistry</td>
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<td>CHEM 112 General Chemistry</td>
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<tr>
<td>ENGL 100 Freshman Composition</td>
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<tr>
<td>ENGL 102 Freshman Composition &amp; Literature</td>
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<tr>
<td>MATH 170 Analytic Geometry and Calculus I</td>
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</tbody>
</table>

ADDITIONAL DOCTORATE REQUIREMENTS FOR SPECIFIC SCHOOLS OF PHARMACY

University of Southern California

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ECON 201 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>HUMANITIES AND FINE ARTS</td>
<td>3-3</td>
</tr>
<tr>
<td>PSYC 101 General Introductory Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOCIAL / BEHAVIORAL SCIENCE Two (2) addition courses</td>
<td>3-3</td>
</tr>
<tr>
<td>SPCH 100 Fundamentals of Oral Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Recommended Courses:

Computer Science (Any Course) | 4
MATH 112 Elementary Statistics | 4
PHYS 101 General Physics | 4
PHYS 102 General Physics | 4
For additional general education requirements, consult with the Cerritos College pre-pharmacy counselor.

Pharmacy career information, including accredited colleges of pharmacy, is available from: American Association of Colleges of Pharmacy, 4630 Montgomery Avenue, Suite 201, Bethesda, Maryland, 20014.

CAREER OPPORTUNITIES: Operate prescription pharmacies, dispense drugs and medicine prescriptions; pharmaceutical sales; teach in colleges of pharmacy; supervise manufacture of pharmaceuticals; research; development of new medicines; consultants to medical teams.

PRE-VETERINARY—653
TRANSFER PROGRAM

The following pre-veterinary curriculum has been designed to meet the pre-veterinary requirements as published by the School of Veterinary Medicine at the University of California – Davis. Students are asked to complete a minimum of 90 semester units of college work including the required courses listed below before they apply to the School of Veterinary Medicine. Because enrollment is limited, most successful applicants have completed four or more years of college, a grade-point-average of 3.5-4.0, a strong science background, a good deal of experience with animals, and exceptional motivation toward a career in veterinary medicine.

PRE-VETERINARY COURSE REQUIREMENTS

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<th>Course</th>
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<td>BIOL 201</td>
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<td>PHYS 101</td>
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<td>PHYS 102</td>
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<tr>
<td>ZOOL 120</td>
<td>4</td>
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</tbody>
</table>

Consult with Cerritos College pre-veterinary counselor regarding the breadth courses, which may apply toward the Bachelor's Degree at the Transfer School.

CAREER OPPORTUNITIES: Veterinarians diagnose, treat, and control diseases and injuries among animals. They treat animals in hospitals and clinics or on farms and ranches. Practice specialties include research, teaching, animal breeding, and Federal and State Animal Health Programs.

**PSYCHOLOGY—750**

**TRANSFER PROGRAM**

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
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<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>
</tr>
<tr>
<td>Rec. Electives</td>
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</tr>
</tbody>
</table>

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

**California State University - Fullerton**

PSYC 241 Introduction to Psychology 3
PHIL 202 Critical Thinking and Argumentative Writing 3

**California State University - Long Beach**

PSYC 241 Introduction to Psychobiology 3

**California State University - Los Angeles**

PSYC 241 Introduction to Psychobiology 3

**University of California - Los Angeles**

ANTH 115 Physical Anthropology 3
A&P 120 Introduction to Human Anatomy and Physiology 4
Or BIOL 120 Introduction to Biological Science 4
Or BIOL 200 Principles of Biology 4
CHEM 100 Introductory Chemistry 4
Or CHEM 110 General Chemistry 4
Or CHEM 111 General Chemistry 4
MATH 170 Analytic Geometry and Calculus I 4
Or MATH 112 Elementary Statistics 4
Or MATH 115 Finite Mathematics 4
Or PSYC 210 Elementary Statistics 4
Or CIS 280 Object-Oriented Programming in C++ 5
PHIL 100 Introduction to Psychology 3
Or PHIL 102 Introduction to Ethics 3
Or PHIL 202 Critical Thinking and Argumentative Writing 3
PHYS 100 Elementary Physics 3
Or PHYS 101 General Physics 4
Or PHYS 201 Engineering Physics 4

**University of California - Irvine**

PSYC 101 General Introductory Psychology 3
And PSYC 241 Introduction to Psychobiology 3
PSYC 261 Social Psychology 3
Or PSYC 271 Abnormal Psychology 3
One Course from:
PSYC 150 Personal and Social Adjustment 3
or PSYC 210 Elementary Statistics 3
or PSYC 220 Research Methods 3
or PSYC 251 Developmental Psychology 3

For additional major requirements, consult with the Cerritos College pre-veterinary counselor.
Curricula, Requirements for Majors, Certificates and Transfer Programs

or PSYC 261 Social Psychology 3
or PSYC 271 Abnormal Psychology 3
Recommended:
BIOL 120 Introduction to Biological Science 3
CIS 280 Object-Oriented Programming in C++ 3
MATH 102 Analytic Geometry and Calculus I 4
and MATH 103 Analytic Geometry and Calculus II 4

Two of the following:
ANTH 100 Cultural Anthropology 3
or ANTH 115 Physical Anthropology 3
ECON 101 US & Global Economy 3
SOC 101 Introductory Sociology Principles 3

University of California - Riverside
BIOL 201 Principles of Biology 5
or BIOL 120 Introduction to Biological Science 4
or BIOL 200 Principles of Biology 5
or BOT 120 Introduction to Plant Science 4
and ZOOL 120 Introduction to Animal Biology 4
CHEM 100 Introductory Chemistry 4
or CHEM 111 General Chemistry 5
or CHEM 112 General Chemistry 5
PHYS 201 Engineering Physics 4
or PHYS 202 Engineering Physics 4

Plus two additional courses from above (Biology, Chemistry, or Physics)

ASSOCIATE IN ARTS DEGREE:
Complete the above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all AA degree general education requirements for a total of at least 60 units.

CAREER OPPORTUNITIES: Graduate work is extremely important in Psychology. Those holding M.A., or Ph.D. in Psychology may find employment in teaching, private practice, research, health, and welfare programs. Persons without graduate degrees will find employment opportunities limited. See a counselor for further information.

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

RECREATION—425
TRANSFER PROGRAM
California State University - Dominguez Hills
CSUDH offers a B.A. in Recreation and Leisure studies. General Recreation Administration and Therapeutic Recreation options are available. The 12 units of required lower division recreation courses can be completed there.

California State University - Long Beach
CSULB offers a B.A. in Recreation and Leisure studies. The six units of required lower division recreation courses can be completed there.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
A minimum of 60 units to include(1) A minimum of 18 units of Health, Physical Education and Recreation courses including above requirements,(2) AA Degree general education requirements, and (3) electives as needed.

CAREER OPPORTUNITIES: Positions of leadership, supervision, administration in public, private, or voluntary youth and adult recreation or leisure services; in corrective or rehabilitative institutions; in industrial and medical recreation; armed forces recreation.

See Cerritos College Graduation Requirements.

SIGN LANGUAGE
VERIFICATION OF COMPLETION
DIVISION/DEPARTMENT REQUIREMENTS UNITS
SL 50 Beginning Sign Language 2
SL 51 Intermediate Sign Language 2
SL 48 Intermediate II Sign Language 2
SPCH 120 Fundamentals of Interpersonal Communication 3
SPCH 271 Voice and Articulation 3

TOTAL VERIFICATION REQUIREMENTS: 12

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

SOCIAL WELFARE—761
TRANSFER PROGRAM
LOWER DIVISION PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS
California State University - Dominguez Hills
CSU Dominguez Hills has no program in Social Work. It is recommended that students who plan to seek employment in social work or social welfare prepare themselves in the following coursework: Anatomy & Physiology, Human Services, Psychology, Research Methods and Statistics. Contact a Cerritos College Counselor for further information.

California State University - Fullerton:
CSU Fullerton has no program in Social Work or Social Welfare. It is recommended that students who plan to seek employment in social work or prepare themselves in the following coursework: Political Science, Economics, Anthropology, Human Services, Psychology, Sociology, and Research Methods. Contact a Cerritos College counselor for further information.

California State University - Long Beach:
CSU Long Beach offers a Social Work major program.
A&P 120 Introduction to Human Anatomy & Physiology 4
or A&P 130 Human Anatomy and Physiology 5
ANTH 100 Cultural Anthropology 3
PSYC 101 General Introductory Psychology 3
PSYC 210 Elementary Statistics 4
OR MATH 112 Elementary Statistics 4
SOC 101 Introductory Sociology Principles 3

Additional coursework that will be considered advantageous;
Any Ethnic Studies, Women Studies, and Gerontology.

California State University - Los Angeles:
CSU Los Angeles offers a Social Work program.
PSYC 101 General Introductory Psychology 3
OR SOC 101 Introductory Sociology Principles 3
**PSYC 210** Elementary Statistics 4
**OR MATH 112** Elementary Statistics (4)

**CAREER OPPORTUNITIES:** Social Workers are employed in varied settings, including the major societal institutions: Health and mental health care, child welfare, family services, government, education, justice, aging services, recreation, labor and industry and religion. They work in many job classifications: direct service, community organization supervision, consultation, management and administration, education and training, policy analysis and research.

See State University General Education List.

**SOCIODY—760**

**TRANSFER PROGRAM**

**COMMON LOWER DIVISION PREPARATION**

**FOR THE CALIFORNIA STATE UNIVERSITY AND UNIVERSITY OF CALIFORNIA**

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<thead>
<tr>
<th>Course</th>
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<tr>
<td>PSYC 210</td>
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<tr>
<td>or MATH 112</td>
<td>(4)</td>
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<tr>
<td>SOC 101</td>
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</table>

**LOWER DIVISION REQUIREMENTS**

**FOR SPECIFIC TRANSFER INSTITUTIONS**

**California State University - Long Beach**

<table>
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<tr>
<th>Course</th>
<th>Units</th>
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<tr>
<td>ANTH 100</td>
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<tr>
<td>SOC 201</td>
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<tr>
<td>ANTH 100</td>
<td>3</td>
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<tr>
<td>PSYC 101</td>
<td>3</td>
</tr>
<tr>
<td>SOC 215</td>
<td>3</td>
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</tbody>
</table>

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

Complete the above common division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all AA degree general education requirements for a total of at most 60 units.

**CAREER OPPORTUNITIES:** Employment opportunities for those holding the BA will be somewhat limited, although placement in Departments of Public Welfare and Probation and Parole are occasionally available. Persons with graduate degrees – M.A., Ph.D. – will qualify for teaching and research positions.

See Cerritos College Graduation Requirements.

See State University General Education List.

**SPANISH—554**

**TRANSFER PROGRAM**

**COMMON LOWER DIVISION PREPARATION**

**FOR THE CALIFORNIA STATE UNIVERSITY AND UNIVERSITY OF CALIFORNIA**

<table>
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<tr>
<th>Course</th>
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<td>SPAN 101</td>
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<td>SPAN 102</td>
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<tr>
<td>SPAN 201</td>
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<td>SPAN 202</td>
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</tbody>
</table>

**ADDITIONAL LOWER DIVISION REQUIREMENTS**

**FOR SPECIFIC TRANSFER INSTITUTIONS**

**California State University - Long Beach**

One year of a second foreign language at the college level, or equivalent.

**California State University - Fullerton and Los Angeles**

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<th>Course</th>
<th>Units</th>
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<td>SPAN 213</td>
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<td>SPAN 214</td>
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<td>SPAN 281</td>
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<td>SPAN 282</td>
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</table>

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

(1) Meet the above requirements as listed for a state university, (2) complete the AA Degree general education requirements, and (3) take electives to achieve a minimum of 60 units.

**CAREER OPPORTUNITIES:** Overseas personnel in American corporations, airline hostess, travel agency personnel, government positions abroad, teaching, librarian, interpreter, and translator.

See Cerritos College Graduation Requirements.

See State University General Education List.

**SPEECH COMMUNICATION**

**VERIFICATION OF COMPLETION**

A verification of completion shall be awarded to the student who completes with a grade of "C" or higher the following courses:

**DIVISION/DEPARTMENT REQUIREMENTS**

<table>
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<tr>
<th>Course</th>
<th>Units</th>
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<tr>
<td>SPCH 110</td>
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<td>SPCH 125</td>
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<tr>
<td>SPCH 120</td>
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<tr>
<td>SPCH 130</td>
<td>3</td>
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<tr>
<td>SPCH 132</td>
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</tbody>
</table>

**TOTAL VERIFICATION REQUIREMENTS:**

15

**SPEECH—540**

**TRANSFER PROGRAM**

**LOWER DIVISION MAJOR REQUIREMENTS**

**FOR SPECIFIC TRANSFER INSTITUTIONS**

**California State University - Long Beach**

<table>
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<th>Course</th>
<th>Units</th>
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<tr>
<td>SPCH 120</td>
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<td>SPCH 130</td>
<td>3</td>
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<td>SPCH 132</td>
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**COMMUNICATIONS EMPHASIS**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>SPCH 235</td>
<td>3</td>
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<td>SPCH 271</td>
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**California State University - Fullerton**

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<th>Course</th>
<th>Units</th>
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<td>SPCH 100</td>
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<tr>
<td>SPCH 130</td>
<td>3</td>
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<tr>
<td>SPCH 235</td>
<td>3</td>
</tr>
</tbody>
</table>
For Secondary school teaching emphasis ADD:
SPCH 239 Forensics Workshop 2

California State University - Los Angeles
SPCH 140 Oral Interpretation 3
OR SPCH 132 Small Group Communication (3)
SPCH 235 Argumentation and Persuasion 3

RECOMMENDED ELECTIVES: Economics, Sociology, and Political Science.

NOTE: It is strongly recommended that students with high school forensic experience take Speech 235 during their freshman year.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS: Complete the above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all AA degree general education requirements for a total of at least 60 units.

CAREER OPPORTUNITIES: Public relations, Sales, Teaching, Law, Politics, Administration, Communications, Consulting, and Broadcasting.

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

SPEECH-LANGUAGE PATHOLOGY AIDE—941
CERTIFICATE OF ACHIEVEMENT
A Certificate of Achievement shall be awarded to the student who completes with a grade of "C" or better the following courses:
CD 110 Child Development 3
CD 138 Observation & Assessment of Childhood Behavior 1.5
CDSE 50 Survey of Special Education 3
SLP 110 Normal Communication, Disorders & Differences 4
SLP 125 Childhood Disorders and Treatment 5

Total Verification Requirements 19.5

Career Opportunities: Upon completion of the courses, employment is available in educational settings where the aide will be supervised by a licensed Speech-Language Pathologist.

SPEECH-LANGUAGE PATHOLOGY ASSISTANT—940

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.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
A minimum of 60 degree applicable units including the following requirements must be completed to qualify for the A.A. Degree.

REQUIRED COURSES: UNITS
First Year
First Semester
CD 110 Child Development 3
CDEC 113 The Child, Family, and Community 3
EDT 1 Windows for Educators 1
EDT 7 Word for Educators I 1
SLP 100 Introduction to Speech-Language Pathology 3
SLP 110 Normal Communication, Disorders & Differences 5
Total 15

Second Semester
CD 137 Positive Child Guidance 1.5
CD 138 Observation & Assessment of Childhood Behavior 1.5
CDSE 50 Survey of Special Education 3
SPCH 271 Voice and Articulation 3
SLP 120L Phonetics Lab 1
SLP 125 Childhood Disorders and Treatment 5
Total 15

Second Year
First Semester
SL 101 Beginning American Sign Language 3
SPCH 229 Speech & Language Development in Children 3
SLP 230 Adaptive Communication Technology 1.5
SLP 235 Adult Disorders and Treatment 5
Total 12.5

Second Semester
SL 51 Intermediate Sign Language 2
SLP 240 Childhood Field Experience 2.5
SLP 245 Adult Field Experience 2.5

Total Units 48.5

Recommended Elective:A&P 120
See Cerritos College Graduation Requirements

TEACHING CREDENTIAL PREPARATION
The State of California provides for a two-step, five-year program leading to the Basic Teaching Credential. A student may complete the requirements for a Preliminary Credential within a four-year college program and may be employed at that point, providing all requirements have been met (except the fifth year). Within five years, the
student must complete an additional year of study. At that point, a
Clear Teaching Credential is granted. The first two years of this
process may be completed at Cerritos College.

SINGLE SUBJECT INSTRUCTION CREDENTIAL
(Primarily for Secondary Schools)
A teacher authorized for Single Subject instruction may be
assigned to teach this subject at any grade level—pre-school through
classes for adults. In practice, most teachers with Single-Subject
authorization teach in junior or senior high schools, grades 7-12.
A candidate lacking this major background may validate competen-
cy by passing an examination in a specified subject matter
category. No minor is required.

MULTIPLE-SUBJECT INSTRUCTION CREDENTIAL
(Liberal Studies/Elementary School Teaching)
A teacher authorized for Multiple-Subject instruction may be
assigned to teach in any self-contained, multiple subject classroom—
pre-school through classes for adults. In practice, most teachers with
Multiple-Subject authorization teach in Early Childhood and
Elementary Education, pre-school through grade six.
Multiple-Subjects majors are usually referred to as “diversified”
or “liberal studies” degrees. Completion of a program that is approved
by the Commission is referred to as a Subject Matter Preparation
Program.
Completion of the courses recommended below will partially
satisfy requirements for the Liberal Studies elementary school
teaching option offered at the indicated CSU’s and UCR. The courses
are part of a curriculum that can be started at a community college
and completed at the CSU and UCR. The entire curriculum is
designed for individuals who seek the pre-professional subject matter
preparation for elementary school teaching consistent with the stan-
dards established by the California Commission on Teacher
Credentialing. Students who wish to choose an academic major other
than Liberal Studies in order to prepare for elementary school
teaching should schedule an appointment with their counselor.

Students who wish to choose a liberal arts major in order to ben-
et from a broad interdisciplinary liberal arts education and do not
wish to pursue elementary school teaching should see a Cerritos
College counselor for advisement. Requirements may vary from those
listed below.
An Associate In Arts Degree in liberal studies is not available at
Cerritos College. Students may however, declare General Studies as
their major.

California State University Dominguez Hills:
English 100 and 102
Speech 100,120,130, or 132
English 103, Philosophy 106,202, or Speech 235
Biology 120
Any Physical Science course from Area B1* (ESCI 110 preferred)
Math 110A and 110B
English 222
Language other than English (at least 6 units of the same
language, or for other options see counselor)
Art 100,101,102,103, or 106,(100 preferred)
Music 100 or 105,(105 preferred)
History 101,201,202,220, or 221,(201 preferred)
Political Science 101 or 201,(101 preferred)
Geography 105
History 245 or 246 (245 preferred)
Child Development 110 or Psychology 251
EDT 110 and one from EDT 4,9 or 11
Any course from Area E* (PE 141 preferred)

California State University, Long Beach:
The following courses meet lower division requirements for the
tradition teacher preparation program consisting of a BA and year-
long credential program. Teacher TRAC requirements differ from
those below. Please contact the TRAC office for the appropriate
transfer courses.
English 100
Speech 130
English 103, Philosophy 106,202, or Speech 235
Biology 120
Earth Science 110
Geology 101
Math 110A and 110B
Music 105
Theatre 101 or Physical Education 191
English 102,230A,230B,246A,246B,248A, or 248B
English 222 or Speech 145
Philosophy 100,102, or 200
History 101 or 201
Political Science 101 or 201
Anthropology 100
Geography 105
History 120
Psychology 101
Child Development 110

Note: Foreign Language is not required for the major. At least 6
college-level units of language other than English however are
required for a multiple subject teaching credential at CSULB. This
requirement can also be satisfied by completing three years of the
same foreign language in high school with a grade of “B” or better.
Additional units of foreign language may be needed for a bilingual
credential. See a counselor for other ways to meet this requirement.

California State University, Los Angeles:
English 100
Speech 130
Philosophy 202 or Speech 235
Astronomy 101 and 105L or Geology 101
Earth Science 110
Any biological lab science from Area B*2
(Math 110A,110B and Math 100
English 102 and English 103
Art 101,102, Music 100,105, or Theatre 101
History 201
History 240
Political Science 101 or 201
Psychology 101
Geography 102
Foreign Language (one semester minimum)
Anthropology 100 or History 110
Physical Education 141

California State University, Fullerton:
Speech 100,120,130, or 132
English 100
English 103, Philosophy 106,202, or Speech 235
Any Chemistry or Physics course from Area B.1*
Astronomy 101 (or 101 and 105L), Earth Science 101 (or 101 and 101L), 104, 106, 110, Geography 101, Geology 101, 110, 201, 204, or 207
Any Biological Science course from Area B.2* (Lab required for Physical Science or Biological Science)
Any Mathematics course from Area B.3* (Math 110A and 110B recommended)
Any Fine Arts course from Area C.1*. (Music 105 or knowledge of music theory recommended for Liberal Studies majors)
English 230A, 230B, 246A, 248A, or 248B (+Liberal Studies students should include either 248A or 248B.
Students who may want to teach English at the Junior High level should satisfy at least one or these literature requirements at the upper division level at CSUF).
English 222
English 248A or Philosophy 100
(Liberal Studies students should wait to meet this requirement at CSUF)
Foreign Language (1 semester minimum; Spanish 103A and 103B preferred)
History 101, 201, 202, 220, or 221
History 245
Political Science 101 or 201
Geography 102 or 105
One course from Area D.3* (e.g. Anthropology 100, Psychology 101, or Sociology 101)
Child Development 110
One course from Area E*

Note: Students planning to become elementary teachers are welcome to call the Center for Careers in Teaching at CSUF for additional information or clarification about program requirements (714-278-7130) or refer to their web site at www.fullerton.edu/cct.

*REFERS TO AREAS DESIGNATED WITHIN THE CSU GENERAL EDUCATION CERTIFICATION REQUIREMENTS.

University of California - Riverside
English 100
English 103, Philosophy 202, or Psychology 103
Speech 130
Biology 120
2 courses selected from: Astronomy 101, 102, 103; Chemistry 100; Geography 101; Geology 101, or 201
Biology 105, Earth Science 101, Sociology 120, or an additional science selected from above
Math 150
Art 101, 110, 116, or Photography 100 and 160
Music 100, 104, 106, 107
English 106
Philosophy 200 or English 221A and English 221B
Philosophy 100, 102, or 106
Language other than English, level 3
History 201
Political Science 101
Anthropology 100
History 245
Sociology 101
Health Education 100

OTHER CREDENTIALS
Specialist and Service Credentials. Specialist Credentials-such as for Special Education, Early Childhood Education, or Reading-and Service Credentials-such as for Counseling and Administration-requires graduate study.

Designated Subject Credential Designated Subject Credentials are based on experience in the trade or technical area to be taught.
The Counseling Staff can help you locate approved programs and help you design your own program at CSUF to make transfer as efficient as possible.

THEATRE ARTS—130
ASSOCIATE IN ARTS DEGREE PROGRAM

The following Theatre Program of Study has been designed to prepare students for an AA Degree. Students interested in preparing for a Bachelor’s Degree at a four-year college are referred to the Theatre Arts Transfer Program (135).

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
TH 114 Voice for Acting
TH 115 Stage Movement and Combat

CHOOSE TWO:
TH 120 Theatre Stagecraft
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

PLUS SIX (6) UNITS FROM AT LEAST TWO OF THE FOLLOWING:
TH 108 Improvisation for the Theatre
TH 111 Intermediate Acting
TH 114 Voice for Acting
TH 115 Movement for the Actor
TH 120 Theatre Stagecraft
TH 123 Stage Make-Up
TH 136 Community Theatre Production
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

MEDIA EMPHASIS (25 UNITS REQUIRED)
TH 150 Appreciation and History of the Motion Picture
TH 151 Motion Pictures, Radio and Television
TH 152 Introduction to Broadcasting
TH 153 Motion Picture Production
TH 155 Radio Production

151
Curricula, Requirements for Majors, Certificates and Transfer Programs

TH 156 Television Production 3
TH 159 Multicultural Film 3
TH 258 Broadcast Writing and Pre-production 3
MUS 146 Recording Techniques 2

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
A minimum of 60 units must be completed to include: (1) one of the options above, (2) AA Degree general education requirements, and (3) electives as needed.

CAREER OPPORTUNITIES: Acting, announcing, directing, scriptwriting, reporting, construction and painting technician, costume construction technician, lighting and design technician, media/sound recording technician, theatre and media production assistant, playwriting, theatre management and box office worker, stage and media publicity technician.

See Cerritos College Graduation Requirements.

THEATRE ARTS—135
TRANSFER PROGRAM
COMMON LOWER DIVISION PREPARATION
FOR CALIFORNIA STATE UNIVERSITY AND UNIVERSITY OF CALIFORNIA
UNITS
TH 110 Fundamentals of Acting 3
TH 120 Theatre Stage Craft 3

ADDITIONAL LOWER DIVISION REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS
California State University - Dominguez Hills
TH 101 Introduction to the Theatre 3

California State University - Fullerton
Acting Emphasis:
SPCH 140 Oral Interpretation of Literature 3
TH 101 Introduction to the Theatre 3
TH 111 Intermediate Acting to Characterization 3
TH 114 Voice for Acting 2
TH 115 Stage Movement and Combat 3
TH 123 Stage Make-Up 2
TH 212 Scene Study 3

Technical Production/Design Emphasis:
TH 101 Introduction to the Theatre 3
TH 111 Intermediate Acting to Characterization 3
TH 123 Stage Make-Up 2
TH 221 Costuming for the Stage 3
TH 226 Introduction to Scenic Design 2

California State University - Los Angeles
TH 111 Intermediate Acting to Characterization 3
TH 212 Scene Study 3

California State University - Long Beach
TH 123 Stage Make-Up 2
TH 221 Costuming for the Stage 3
TH 222 Stage Lighting 3

University of California - Irvine
Drama Major:
TH 111 Intermediate Acting to Characterization 3

TH 221 Costuming for the Stage 3
TH 222 Stage Lighting 3
TH 226 Introduction to Scenic Design 2
Plus, two (2) courses in Dance (Ballet, Jazz, Modern, Tap).

University of California - Los Angeles
Select courses from recommended preparation:
TH 114 Voice for Acting 2
TH 115 Stage Movement and Combat 3
TH 133 Stage Crew Activity 1
TH 221 Costuming for the Stage 3
TH 222 Stage Lighting 3

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete the above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all AA degree general education requirements for a total of at least 60 units.

CAREER OPPORTUNITIES: Preparation for the Theatrical profession as performer, technician, costuming, lighting, make-up, scenery director, and technical director in such areas as the professional theatre, community theatre, recreational theatre, childrens theatre, and educational theatre.

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

WELDING—861
CERTIFICATE OF ACHIEVEMENT
Welding Technology Certificate 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 UNITS
WELD 50 Blue Print Reading for the Welding Trades 3
WELD 100 Fundamentals of Welding 2
OR WELD 110 Oxy-Acetylene Welding (4)
WELD 120 BeginningArc Welding 4
WELD 170 Structural Fabrication 2
MATH 40 Survey of Mathematics 4
15 (17)

ARC WELDING OPTION—857
WELD 200 Intermediate Arc Welding 4
WELD 210L Arc Welding Applications 2
WELD 220 Certification and Licensing for Welders 2
23 (25)

INERT GAS WELDING OPTION—858
WELD 130 Gas Tungsten Arc Welding Fundamentals 4
WELD 240 Advanced Gas Tungsten Arc Welding Lab (2 labs required) 4
WELD 250L Gas Tungsten Arc Welding Applications 4
27 (29)
PIPE WELDING OPTION—859

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>WELD 52</td>
<td>Pipe Welding Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>WELD 53</td>
<td>Pipe Layout</td>
<td>2</td>
</tr>
<tr>
<td>WELD 54L</td>
<td>Advanced Pipe Welding</td>
<td>2</td>
</tr>
<tr>
<td>WELD 130</td>
<td>Gas Tungsten Arc Welding Fundamentals</td>
<td>4</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>
<tr>
<td>WELD 240L</td>
<td>Advanced Gas Tungsten Arc Welding Lab</td>
<td>2</td>
</tr>
</tbody>
</table>

The MATH 40 requirement for a Certificate of Achievement may be met with a satisfactory score on the Math Placement Test. WELD 51L, Advanced Arc Welding Specialty Lab, may be included to a maximum of 2 units to meet option requirements.

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.

CAREER OPPORTUNITIES: Welder, welding inspector, welding technician or fitter, pipe fitter, maintenance mechanic. Welders are employed in aircraft industries, shipyards, job shops, pipeline construction, and building construction.

See Cerritos College Graduation Requirements.

WILDLIFE MANAGEMENT—675
TRANSFER PROGRAM
LOWER DIVISION 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 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 PHYS 101</td>
<td>General Physics</td>
<td>(4)</td>
</tr>
<tr>
<td>MATH 116</td>
<td>Calculus for Managerial, Biological and Social Sciences</td>
<td>4</td>
</tr>
</tbody>
</table>

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

CAREER OPPORTUNITIES: Upon completion of the program, a student is prepared to design, construct, and produce cabinet and furniture products to industry standards.

See Cerritos College Graduation Requirements.

WOODWORKING MANUFACTURING TECHNOLOGIES—893
CERTIFICATE OF ACHIEVEMENT PROGRAM

<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>2</td>
</tr>
<tr>
<td>WMT 102</td>
<td>Machine Wood Technology</td>
<td>4</td>
</tr>
<tr>
<td>WMT 103</td>
<td>Machine Wood Technology II</td>
<td>4</td>
</tr>
<tr>
<td>WMT 107</td>
<td>Wood Finishing</td>
<td>3</td>
</tr>
<tr>
<td>WMT 151</td>
<td>Introduction to Cabinetmaking</td>
<td>4</td>
</tr>
<tr>
<td>WMT 181</td>
<td>Introduction to Computer Operations for Cabinetmaking and Design</td>
<td>2.5</td>
</tr>
<tr>
<td>TM 50</td>
<td>Technical Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>ART 20</td>
<td>Two-dimensional Design</td>
<td>3</td>
</tr>
</tbody>
</table>

AND TWELVE (12) UNITS SELECTED FROM THE FOLLOWING COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMT 132</td>
<td>Chair Design and Construction</td>
<td>4</td>
</tr>
<tr>
<td>WMT 134</td>
<td>Frame Making</td>
<td>4</td>
</tr>
<tr>
<td>WMT 148</td>
<td>Furniture Making and Manufacturing</td>
<td>4</td>
</tr>
<tr>
<td>WMT 153</td>
<td>32MM System of Cabinetmaking</td>
<td>4</td>
</tr>
<tr>
<td>WMT 171</td>
<td>Introduction to Boat Building</td>
<td>3</td>
</tr>
<tr>
<td>WMT 202</td>
<td>Advanced Machine Wood Technology</td>
<td>4</td>
</tr>
<tr>
<td>WMT 211</td>
<td>The Workbench Class</td>
<td>4</td>
</tr>
<tr>
<td>WMT 212</td>
<td>Router and Router Tables</td>
<td>4</td>
</tr>
<tr>
<td>WMT 248</td>
<td>Production Furniture Making and Manufacturing</td>
<td>4</td>
</tr>
<tr>
<td>WMT 249L</td>
<td>Furniture Manufacturing Specialty</td>
<td>2.5</td>
</tr>
<tr>
<td>WMT 251</td>
<td>Advanced Cabinetmaking</td>
<td>2</td>
</tr>
<tr>
<td>WMT 253</td>
<td>Advanced 32MM System of Cabinetmaking</td>
<td>3</td>
</tr>
<tr>
<td>WMT 268</td>
<td>Production Cabinetmaking and Manufacturing</td>
<td>5</td>
</tr>
<tr>
<td>WMT 281</td>
<td>Advanced Computer Operations for Cabinetmaking and Design</td>
<td>2.5</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE UNITS: 37.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS

Complete 60 units to include (1) the above Certificate of Achievement requirements, (2) BA 41, (3) the Associate in Art Degree requirements, and (4) electives as needed.

RECOMMENDED ELECTIVES: WMT 211, WMT 212, WMT 268

CAREER OPPORTUNITIES: Upon completion of the program, a student is prepared to design, construct, and produce cabinet and furniture products to industry standards.

See Cerritos College Graduation Requirements.

WOMEN’S STUDIES
(Pending Chancellor’s Office Approval)
The A.A. degree in Women’s Studies is a two-year academic program geared for transferring students. Its emphasis will be to explore the role of gender as it influences culture, politics, economics and women's history.

The underlying academic objectives of our program are captured in our mission statement. "The Cerritos College Colloquium for Women's Studies believes that the attitudes that shape a society's treatment of gender influence its economic, social and cultural politics. As such, we hold that women's rights should be studied in the broader context of human rights. Since we are committed to meeting the needs of all our students, we promote an inclusive curriculum."

To graduate in a Women's Studies major, a student must complete 15 units within the courses listed below. Two of the classes must be from the "core" courses, while the others can be selected from the recommended standard electives. Within the "core" courses, all Women's Studies majors are required to take Women's Studies 101, a foundational course in the theory and issue of Women's Studies.

The objectives of the proposed program:
1. Provide students with a two-year sequenced A.A. degree program in Women's Studies.
2. Provide students with a two-year program that combines required "core" courses in Women's Studies with a variety of electives offered by the Women's Studies Department.
3. Provide students with specific transfer articulation agreements with two universities: The California State University, Long Beach and the University of California, Irvine when the agreement is completed.
4. Offer a degree program in Women's Studies that sets high academic standards and that helps students to understand the way gender influences our history, culture, literature, political system, and economic decision-making.

WOMEN'S STUDIES—520
(Pending Chancellor's Office Approval)

ASSOCIATE IN ARTS DEGREE

MAJOR REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS 101</td>
<td>3</td>
</tr>
<tr>
<td>ECON 102</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 236</td>
<td>3</td>
</tr>
<tr>
<td>Select one of these courses (3 units):</td>
<td></td>
</tr>
<tr>
<td>ECON 202</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 224</td>
<td>3</td>
</tr>
<tr>
<td>Additional requirements (select at least 9 units):</td>
<td></td>
</tr>
<tr>
<td>ECON 202</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 224</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 105</td>
<td>3</td>
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<tr>
<td>HED 100</td>
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<tr>
<td>HIST 101</td>
<td>3</td>
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<tr>
<td>PHIL 202</td>
<td>3</td>
</tr>
<tr>
<td>PE 160</td>
<td>1</td>
</tr>
<tr>
<td>SOC 101</td>
<td>3</td>
</tr>
</tbody>
</table>

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
To qualify for a degree in Women's Studies students must take courses listed above that are designated as having Women's Studies emphasis and complete all A.A. degree general education requirements for a total of at least 60 units.

ZOOLOGY—695

TRANSFER PROGRAM

LOWER DIVISION PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

<table>
<thead>
<tr>
<th>Institution</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>California State Polytechnic University--Pomona:</td>
<td>MATH 116  Calculus for Managerial, Biological and Social Sciences</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 200  Principles of Biology</td>
<td></td>
<td>(5)</td>
</tr>
<tr>
<td>BIOL 201  Principles of Biology</td>
<td></td>
<td>(5)</td>
</tr>
<tr>
<td>University of California, Santa Barbara</td>
<td>CHEM 111  General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 200  Principles of Biology</td>
<td></td>
<td>(5)</td>
</tr>
<tr>
<td>BIOL 201  Principles of Biology</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>MATH 102  Analytic Geometry and Calculus I</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>MATH 103  Analytic Geometry and Calculus II</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>MATH 116  Calculus for Managerial, Biological and Social Science</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>MATH 112  Elementary Statistics</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>MATH 240  Calculus and Differential Equations</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101  General Physics</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102  General Physics</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete 60 units to include (1) the above required courses, (2) electives as needed, and (3) the Associate in Arts Degree requirements.

CAREER OPPORTUNITIES: Bachelor's Degree programs are designed to qualify the student for graduate study, entrance to medical, dental or veterinary schools, teaching through secondary schools, employment in Federal and State Civil Service, research laboratories of industrial, pharmaceutical firms, or natural museum work.

See Cerritos College Graduation Requirements.
See State University General Education List.
ANNOUNCEMENT OF COURSES

This section of the catalog provides the course description for all courses approved by the Cerritos College Curriculum Committee.

All courses, unless otherwise indicated, apply for credit toward an A.A. Degree in accordance with California Administrative Code, Title V, Section 55805.5.

Courses that do not meet the A.A. Degree requirements are indicated with a statement "(Not degree applicable)" beside the course title.

Students are advised to see a counselor for clarification if they have any questions regarding the appropriateness of a course to meet their educational goal.

Please check with your counselor and the department for new developments in curriculum that have not been included in the catalog.

CALIFORNIA ARTICULATION NUMBERS (CAN)

The California Articulation Number System, known as CAN, is a means of identifying comparable courses offered at Cerritos College and other colleges in California. CAN is a system that uses the same prefix and number to identify a course on every participating campus. Each campus has its own number; the CAN is added to denote courses that can be used in lieu of each other at participating colleges. For example, if CAN BUS 2 (BUSA 101) is completed at Cerritos College, that course will be accepted as a course that is designated as CAN BUS 2 at another college campus.

A CAN-identified course assures that a course is not only transferable, but will be used on the receiving campus in the same way as its own CAN-identified course. Over 100 campuses in California are using the CAN System to assist their students in the transfer process. More than 80 Cerritos College courses carry a CAN designation. The CAN designation for Cerritos College courses is listed in the catalog with course descriptions. (See BUSA 101). Additional information is available in the CAN Catalog of Courses in the Counseling Office.
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All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
ACCOUNTING

SEE BUSA
(Business Accounting/Finance)

ADMINISTRATION OF JUSTICE

(Humanities/Social Sciences Division)

The following courses have been developed by an Area Advisory Committee and are uniform in content with the offerings of most colleges and in conformance with guidelines from the California Community College Chancellor's office.

A] 71
FIRST AID—ADMINISTRATION OF JUSTICE 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
This basic course in emergency first aid and cardiopulmonary resuscitation emphasizes how to recognize and render assistance to the ill or injured where there is an airway obstruction, respiratory arrest, cardiac arrest, severe bleeding, shock, actual or suspected fractures, head injuries, or other life-threatening environmental circumstances. This course meets the California Department of Health requirements as described in the California Administrative Code. A basic Red Cross Certificate will be issued to those students who successfully complete the course. (Formerly AJ 13)

A] 91
REPORT WRITING PROCEDURES 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course includes the procedures and practices commonly used to gather data and prepare a variety of police records. Emphasis will be placed upon the need to use correct spelling, sentence structure, punctuation and vocabulary in criminal justice reports to meet statistical, legal and other prosecution requirements of the criminal justice system. (Formerly AJ 11)

A] 101
INTRODUCTION TO ADMINISTRATION OF JUSTICE 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course provides a study of the history and philosophy of the system of administration of criminal justice in the United States. It examines the various sub-systems; role expectations and their interrelationships; theories of crime, punishment, and rehabilitation; ethics; education and training for professionalism in the system; and legal words and phrases as an aid in the communication process. (Formerly AJ 1)
Transfer Credit: CSU; UC

A] 102
CONCEPTS OF CRIMINAL LAW 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course provides an introduction to the historical development and philosophy of law and constitutional provisions; as well as crime definitions, classifications of crime, legal research, legal methodology, and concepts of law as a social force. A brief analysis of criminal intent, parties to a crime, elements of crime, corpus delicti, defenses to crimes and an introduction to laws of arrest will also be undertaken in this class. (Formerly AJ 2.1)
Transfer Credit: CSU; UC

A] 103
CRIMINAL PROCEDURES 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course provides a detailed examination of California criminal procedure, including the California court system, jurisdiction and venue, laws of arrest, grand jury proceedings, extradition, pre-trial procedures, conduct of criminal trials, rights of the defendant, post-trial motions and appeals, probation and parole. (Formerly AJ 3)
Transfer Credit: CSU;

A] 104
CRIMINAL EVIDENCE 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course stresses the origin, development, philosophy, and constitutional basis of evidence; constitutional and procedural considerations which affect arrest, search and seizure; kinds and degrees of evidence; the rules governing the admissibility of evidence; and judicial decisions relating to individual rights. (Formerly AJ 4)
Transfer Credit: CSU

A] 105
COMMUNITY RELATIONS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course provides a study of the relationship between law enforcement agencies and the changing communities they serve. The student will compare various approaches to preventing crime and limiting the effects of crime on the individual and the community. The course will also focus on the ethics, politics and the professional image necessary to maintain positive rapport between law enforcement agencies and their communities. (Formerly AJ 5)
Transfer Credit: CSU; UC

A] 110
CONCEPTS OF ENFORCEMENT SERVICES 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course explores the theories, philosophies and operational concepts of Law Enforcement Field Services, and examines the role expectations of the police field officer. Emphasis is placed upon patrol, traffic and public service responsibilities and their relationship to the total criminal justice system. (Formerly AJ 10)
Transfer Credit: CSU

A] 130
TRAFFIC CONTROL AND INVESTIGATION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is an in-depth study of the California Vehicle Code, the enforcement of basic traffic laws, selective enforcement, public relations, highway safety engineering, and violator contact. Also included are accident investigation, skid mark analysis, preservation of evidence, hit and run investigation, the intoxicated driver, enforcement methods and psychology, and specialized traffic enforcement units. (Formerly AJ 30)
Transfer Credit: CSU

A] 150
INTRODUCTION TO CORRECTIONS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course introduces the student to the philosophy, history, functions and objectives of the system of corrections in the United States. It includes a study of correctional institutions, community based corrections, parole and probation. An overview of special problems and clientele, custody practices and procedures, and treatment techniques will be stressed. (Formerly AJ 50)
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
AJ 173
ADMINISTRATIVE OF JUSTICE
OCCUPATIONAL WORK EXPERIENCES 4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Administration of Justice work experience 173 or 20 hours of employment per week for Administration of Justice work experience 174. The employment must be in a job related to the student's educational goal. Prerequisite: (1) Concurrent enrollment in the Administration of Justice vocational program with 7 or more units including occupational work experience. (2) Consent of the department.

Occupational Work Experience is a supervised employment program in an approved work station related to the student's declared major. Students meet with their instructor for a minimum of one hour per week and will receive credit for on-the-job learning experiences that are new or are an expansion of their regular responsibilities. Student who are not employed but wish to gain work experience may be placed in a non-paying position if such opportunities are available. This course may be taken for a maximum of 16 units. (Formerly AJ 73/74)
Transfer Credit:CSU

AJ 180  (Not degree applicable)
INTRODUCTION TO PRIVATE AND BUSINESS SECURITY  2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.

This course provides students with a presentation of the history and development of security services and inter-relationships with legal processes, including the organization, administration, and management of private security. The operation of security departments, including investigations into internal thefts and customer thefts, public relations, and a comparison of public and private enforcement statutes and procedures is covered. Current requirements for state security personnel and an examination of career opportunities will be discussed. Powers of arrest will be taught, which satisfies the requirements of the State of California under Business and Professions Code Section 7514.1. (Formerly AJ 80)

AJ 202
SUBSTANTIVE LAW  3 UNITS
Class hours: 3 lecture
Prerequisite: AJ 102 or equivalent with a grade of Credit or “C” or higher.
This course is a study of the substantive criminal laws commonly enforced by municipal, county or state police officers, or other criminal justice investigators. The course provides a complete analysis of both statutory laws and case decisions. (Formerly AJ 2.2)
Transfer Credit:CSU

AJ 208
SPECIAL ISSUES IN LAW ENFORCEMENT  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course provides instruction in special issues critical to effective service by law enforcement professionals in modern society. Topics to be covered will include police as professionals; defining and applying values, principles, and moral standards to law enforcement; police and the community; tactical communication; correctly utilizing information systems in police work; and dealing effectively with persons with disabilities. (Formerly AJ 97.1/AJ 8)
Transfer Credit:CSU

AJ 222
JUVENILE PROCEDURES  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course emphasizes the organization, functions, and jurisdiction of juvenile agencies; the processing and detention of juveniles; juvenile case disposition; juvenile statutes and court procedures relative to juvenile offenders. (Formerly AJ 22)
Transfer Credit:CSU

BUSINESS

SEE BA (Business Administration)

ANATOMY AND PHYSIOLOGY
(Science/Engineering/Math Division)

A&P 120
INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY 4 UNITS
Class hours: 3 lecture/1 quiz/2 lab
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.

This course 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.)
(Formerly A&P 10)
Transfer Credit: CSU; UC

A&P 130
HUMAN ANATOMY AND PHYSIOLOGY 5 UNITS
Class hours: 4 lecture/1 quiz/2 lab
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher, satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of Credit or “C” or higher, and CHEM 100 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.

This course examines the gross and microscopic structures of the human body using a systematic approach. Emphasis is placed on

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
The normal function and integration of the organ systems. Homeostatic imbalances of many systems are examined. The laboratory utilizes models, human cadaver, skeletal materials, dissection and selected physiological exercises. This course is designed for students entering the nursing program at Cerritos College; however, it also meets the needs of other allied health programs. This course is strongly recommended for students who plan on taking A&P 200 and A&P 201. (Formerly A&P 40) Transfer Credit: CSU; UC

A&P 200 (CAN BIOL SEQ B)(CAN BIOL 10) HUMAN ANATOMY 5 UNITS
Class hours:3 lecture/2 quiz/4 lab
Recommendation: BIOL 120 or equivalent with a grade of Credit or "C" or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or "C" or higher.
This course emphasizes the gross structure, microscopic anatomy, and embryology of the organ systems of the human body. Emphasis is placed on showing the complementarily structure and function of the cellular, tissue, organ, and system levels. This course satisfies the requirements for majors in four year nursing programs, physical therapy, physical education, dental hygiene, and related fields. (Formerly A&P 52) Transfer Credit: CSU; UC

A&P 201 (CAN BIOL SEQ B)(CAN BIOL 12) HUMAN PHYSIOLOGY 5 UNITS
Class hours:3 lecture/2 quiz/4 lab
Prerequisite: A&P 200 and CHEM 100 or equivalent with grades of Credit or "C" or higher.
This course involves a detailed study of the function of the human body with an emphasis on the maintenance of homeostasis by the various organ systems. The course will meet the requirements of four year nursing, dental hygiene, physical therapy, paramedical, physical education, and related majors. (Formerly A&P 53) Transfer Credit: CSU; UC

ANTHROPOLOGY
(Humanities/ Social Sciences Division)

ANTH 100 (CAN ANTH 4) CULTURAL ANTHROPOLOGY 3 UNITS
Class hours:3 lecture
Prerequisite: None.
This course traces the social behavior of present societies exploring various cultures on earth. The class will study those societies in terms of culture growth, through a survey of the basic, learned behavior patterns. Thus the class will study a wide range of cultural phenomena, including material culture, social organization, customs, religions, languages, family life, economics, the arts and literature. (This course is not open to students who are currently enrolled in or who have received credit for Anthropology 101.) (Formerly ANTH 2) Transfer Credit: CSU; UC

ANTH 101 FACES OF CULTURE 2 UNITS
Class hours:2 lecture
Prerequisite: None.
This is an introductory study of the structures and process of culture. The basic concepts of culture are presented including subsistence patterns, organizing devices, patterns for transmission of culture, economics, political organizations, social control, and culture change. The methods of anthropological research and major theoretical orientations are also described. (This course is not open to students who are currently enrolled in or who have received credit for Anthropology 100.) (Formerly ANTH 5) Transfer Credit: CSU

ANTH 115 PHYSICAL ANTHROPOLOGY 3 UNITS
Class hours:3 lecture
Prerequisite: None.
This course is about the human past; where we came from and how we got to be the way we are today in terms of both biological and cultural evolution. The topics covered will include: the origin and development of the human species; heredity and population genetics; fossil evidence; the human's relation to the rest of the animal kingdom; and modern human diversity and variation. (Formerly ANTH 1) Transfer Credit: CSU; UC

ANTH 120 INTRODUCTION TO ARCHAEOLOGY 3 UNITS
Class hours:3 lecture
Prerequisite: None.
Archaeology is the study of mankind's past. This course will cover the history of archaeology, and explore the objectives and methods of modern archaeology. Today's archaeological curiosity is tempered by the scientific method; a combination of sciences in order to get a better grasp on a total understanding of people. This course will explore the world of the archaeologist in order to appreciate the impact that the study of antiquities has had in understanding modern human cultures. (Formerly ANTH 3) Transfer Credit: CSU; UC

ANTH 200 NATIVE PEOPLES OF NORTH AMERICA 3 UNITS
Class hours:3 lecture
Prerequisite: None.
The course is a study of the origins, culture areas, and sociocultural patterns of the native Americans, north of Mexico. This will include a study of the historic spectrum, from prehistory to contemporary times. Emphasis will be on the culture change after contact with Europeans, and the impact of the Western expansion. (Formerly ANTH 4) Transfer Credit: CSU; UC

ANTH 201 NATIVE PEOPLES OF CALIFORNIA 3 UNITS
Class hours:3 lecture
Prerequisite: None.
This course is a survey of California Indian cultures including their prehistory and social, political, and religious beliefs. The effects of European, Middle American, and Asian contact, and the resultant adaptations on current life situations of contemporary American native Americans will be examined. (Formerly ANTH 10) Transfer Credit: CSU; UC

ANTH 202 THE MAYA, INCA AND AZTECS: ANCIENT CIVILIZATIONS OF THE AMERICAS 3 UNITS
Class hours:3 lecture
Prerequisite: None.
This course is a survey of ancient Indian culture of Northern, Middle and South America, including their prehistory and social, political, and religious beliefs. The impact of European contact and resultant adaptations, as well as current life situations of tribal descendents in contemporary society will be examined. (Formerly ANTH 12) Transfer Credit: CSU; UC

ANTH 203 THE ANTHROPOLOGY OF MAGIC, WITCHCRAFT, AND RELIGION 3 UNITS
Class hours:3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or
higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or "C" or higher. This course is a cross-cultural study of the forms and functions of supernatural beliefs and associated rituals in primarily nonwestern societies. Emphasis is on understanding beliefs and rituals involved in animism, individualistic cults, shamanism, totemism, ancestor worship and witchcraft within their social contexts and within the larger scope of religion and human life. (Formerly ANTH 17) Transfer Credit:CSU

ANTH 250 INTRODUCTION TO FIELD ARCHAEOLOGY 3 UNITS Class hours:1 lecture,6 lab Prerequisite: None. Recommendation: ANTH 120 or equivalent with a grade of Credit or "C" or higher. This is an introduction to the method of field archaeology including archaeological survey, excavation, mapping, recording of sites, and lab analysis of archaeological artifacts. (Formerly ANTH 16) Transfer Credit:CSU

ANTH 251 FIELD TRIPS IN ARCHAEOLOGY 3 UNITS Class hours:1 lecture,6 lab Prerequisite: None. Recommendation: ANTH 250 or equivalent with a grade of Credit or "C" or higher. This is an advanced course in archaeological theory and methods in the field and the laboratory. The emphasis will be on actual site excavation and laboratory analysis. Field trips are required. Fees are required. This course may be taken for a maximum of 6 units. (Formerly ANTH 17) Transfer Credit:CSU

ARCHITECTURE (Technology Division)

ARCH 43/44 (Not degree applicable) ARCHITECTURAL DRAWING OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS Class hours: One (1) hour control class each week plus 15 hours of employment per week for Architectural Drawing work experience 73 or 20 hours of employment per week for Architectural Drawing work experience 74. The employment must be in a job related to the student's educational goal. Corequisite: (1) Concurrent enrollment in the Architectural Drawing vocational program with 7 or more units including occupational work experience. Work experience/career internship provides the opportunity for Architectural Drawing students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to the major and job skills must be completed on the job/training site. These courses may be taken for a maximum of 15-16 units. (Formerly ARCH 73/74)

ARCH 110 INTRODUCTION TO ARCHITECTURE AND ENVIRONMENTAL DESIGN 3 UNITS Class hours:3 lecture Prerequisite: None. This course provides an overview of the architectural profession allowing the student to make an informed career choice. Topics include professional ethics, licensing and educational requirements, career opportunities in related fields, typical organizational structure of architectural firms, legal requirements, and a review of contemporary issues facing the profession. (Formerly ARCH 10) Transfer Credit:CSU;UC

ARCH 111 INTRODUCTION TO ARCHITECTURAL DRAFTING 3 UNITS Class hours:2 lecture/4 lab Prerequisite: None. This course is an introduction to the preparation of architectural working drawings. The course includes drawing conventions, design considerations, and the relationship between different types of architectural drawings, specifications, and construction techniques. Emphasis is placed on residential construction and commercial buildings. The theory of computer-aided drafting is included. (Formerly ARCH 11) Transfer Credit:CSU

ARCH 112 HISTORY OF ARCHITECTURE 3 UNITS Class hours:3 lecture Prerequisite: None. This course is a survey of the history of architecture from the birth of civilization to the present. Emphasis is placed upon the understanding of the technological, sociological, aesthetic, and artistic influences which determine our built environment. This course will familiarize students with the different architectural periods as well as their characteristic design elements and significant architects. (Formerly ARCH 12) Transfer Credit:CSU;UC

ARCH 113 BUILDING CODES 4 UNITS Class hours:4 lecture Prerequisite: None. Corequisite: None. Recommendation: None. This course is an in-depth study of the statutes and regulations which have been established by law to protect the public health, safety, and welfare. Analysis of the construction of buildings, their use, and accessibility requirements in compliance with applicable laws will be stressed. (Formerly ARCH 20) Transfer Credit:CSU

ARCH 121 MATERIALS AND METHODS OF BUILDING CONSTRUCTION 3 UNITS Class hours:2 lecture/4 lab Prerequisite:ARCH 111 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience. Corequisite: None. Recommendation: None. This course presents basic considerations and design implications of major structural and non-structural building systems. 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. (Formerly ARCH 21) Transfer Credit:CSU

ARCH 122 ARCHITECTURAL Delineation 2 UNITS Class hours:1 lecture/3 lab Prerequisite:ARCH 111 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience. Corequisite: None. Recommendation: None. This course is a 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. (Formerly ARCH 30)
Transfer Credit: CSU; UC

ARCH 123
INTRODUCTION TO COMPUTER AIDED DRAFTING FOR ARCHITECTURE 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: ARCH 111 or DRAF 131 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course provides an introduction to computer aided drafting and design using AutoCAD software with architecture specific applications. Students will learn the fundamentals of creating two-dimensional computer drawings including creating and modifying objects, the placing of text and dimensions, working with arrays and blocks, and creating professional quality copies using a computer-driven plotter. Hands-on exercises will be used to reinforce the functions of AutoCAD. (Formerly ARCH 22/ARCH 50)
Transfer Credit: CSU

ARCH 211
ARCHITECTURAL DESIGN, PROGRAMMING, AND PRESENTATION 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: ARCH 121 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course covers the development of critical thinking skills in design and programming of the single building. Study and application of the various factors that determine the form of buildings with a special emphasis on graphic presentations, colors, and models are given. (Formerly ARCH 31)
Transfer Credit: CSU

ARCH 212
ARCHITECTURAL DESIGN THEORY I 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: ARCH 111 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is an introduction to the creative thinking process and its application to basic architectural design theory. Exercises emphasize the development of basic skills and presentation techniques used in the design of simplified architectural projects. Focus on the investigation of the relationship between theoretical concepts, color, space, form, and texture is emphasized. (Formerly ARCH 32)
Transfer Credit: CSU; UC

ARCH 213
ADVANCED APPLICATIONS OF COMPUTER AIDED DRAFTING FOR ARCHITECTURE 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: ARCH 123 or DRAF 138 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course continues to explore computer aided drafting and design using AutoCAD software with architecture specific applications. Students will explore advanced AutoCAD commands to create attributes, external references, and basic customization techniques. This course will also assist students in creating three-dimensional surfaces, images and solid modeling. Students will learn programming techniques using AutoLISP and Visual Basic for Applications (VBA) to increase computer proficiency. Hands-on exercises will be used to reinforce the functions of AutoCAD. (Formerly ARCH 33/ARCH 51)
Transfer Credit: CSU

ARCH 221
WORKING DRAWING/ARCHITECTURAL DESKTOP 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: ARCH 121, ARCH 123 or DRAF 138 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is an advanced computer aided drafting, design theory, and application course. The student will master techniques for creating three-dimensional building models, design presentations, and construction documents for architectural projects in a production environment. Students receive instruction utilizing the most recent release of AutoCAD interfacing with Architectural Desktop. (Formerly ARCH 41)
Transfer Credit: CSU

ARCH 222
ARCHITECTURAL DESIGN THEORY II 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: ARCH 212 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course includes the continued development of the creative thinking process and its application to advanced architectural design theory; focusing on the synthesis of the relationship between theoretical concepts, space, color form, and texture. The emphasis of the course is on presentation graphics, models, and the development of a portfolio of student work. This course is particularly applicable to students wishing to transfer into a professional architectural degree program. (Formerly ARCH 42)
Transfer Credit: CSU

ART 50
CHINESE BRUSH PAINTING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides the basic introduction to oriental brush, ink and colors. The student learns concepts in design and composition, as well as the philosophy that is the basis of Chinese brush painting. Subjects include traditional floral and animal studies, and abstract expressions. Techniques for mounting of art work are also studied. This course may be repeated for a maximum of 6 units. (Formerly ART 69.10/ART 22)

ART 100
INTRODUCTION TO WORLD ART 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is an overview of world art from prehistoric times to the present. It is 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. (Formerly ART 7)
Transfer Credit:CSU;UC

ART 101  (CAN ART SEQ A)(CAN ART 2)  APpreciATION AND HISTORY  3 UNITS
Class hours:3 lecture
Prerequisite: None.
This course is a combination of art appreciation and art history designed to be of interest and value to the art and non-art major. It covers art and its role in human affairs from its beginning to the Renaissance, with emphasis on giving students an understanding and appreciation of sculpture, architecture, painting, and crafts. (Formerly ART 1)
Transfer Credit:CSU;UC

ART 102  (CAN ART SEQ A)(CAN ART 4)  APpreciATION AND HISTORY  3 UNITS
Class hours:3 lecture
Prerequisite: None.
A continuation of ART 101 is presented in this course. Architecture, painting, sculpture, and crafts from the Renaissance to the mid-18th Century are studied historically and critically. (Formerly ART 2)
Transfer Credit:CSU;UC

ART 103  MODERN AND CONTEMPORARY APpreciATION  3 UNITS
Class hours:3 lecture
Prerequisite: None.
This course is designed as a survey of art from the Neo-Classical period of the late Eighteenth Century to the present. The course will focus on the Western World. (Formerly ART 3)
Transfer Credit:CSU;UC

ART 105  WOMEN ARTISTS  3 UNITS
Class hours:3 lecture
Prerequisite: None.
This course is a survey of women artists from the earliest documentation to the present, predominantly in the Western World. (Formerly ART 5)
Transfer Credit:CSU;UC

ART 106  MEXICAN ART  3 UNITS
Class hours:3 lecture
Prerequisite: None.
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.

ART 107  ASIAN ART HISTORY  3 UNITS
Class hours:3 lecture
Prerequisite: None.
Corequisite: None.
This course is a survey of art from the Neoclassical period of the late Eighteenth Century to the present. The course will focus on the Western World. (Formerly ART 1)
Transfer Credit:CSU;UC

ART 108  FREEHAND DRAWING  3 UNITS
Class hours:2 lecture/4 studio
Prerequisite: None.
This is an introductory course in printmaking. The course will increase the student's technical ability and appreciation of various graphic techniques. The student will explore the processes of relief, intaglio (etching, aquatint, drypoint, softground, viscosity, and photoetching), screenprinting and photoscreenprinting, collagography, embossing, and monotype. The course will increase the student's technical ability and appreciation of various graphic techniques. The student will explore the processes of relief, intaglio, screenprinting and photocopying through application and appreciation. Recommended for graphic design majors and drawing and painting majors. (Formerly ART 16)
Transfer Credit:CSU;UC

ART 109  INTERMEDIATE FREEHAND DRAWING  3 UNITS
Class hours: 1 lecture/5 studio
Prerequisite: ART 110 or equivalent with a grade of Credit or “C” or higher.
This course is a further investigation of the fundamentals of ART 101 with emphasis on expression, interpretation, and individual problem solving. In addition to traditional media and techniques, the student will explore experimental and contemporary approaches as they apply to fine arts and graphic arts. (Formerly ART 11)
Transfer Credit:CSU;UC

ART 110  LIFE DRAWING  3 UNITS
Class hours:2 lecture/4 studio
Prerequisite: ART 110 or equivalent with a grade of Credit or “C” or higher.
This course 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. (Formerly ART 12)
Transfer Credit:CSU;UC

ART 113L PRINTMAKING LAB  1 UNIT
Class hours:3 lab
Corequisite: One or more of the following courses: ART 116, ART 117, ART 218, or ART 219.
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 photocopying through application and appreciation. Recommended for graphic design majors and drawing and painting majors. (Formerly ART 15)
Transfer Credit:CSU;UC

ART 116  INTERMEDIATE PRINTMAKING  3 UNITS
Class hours:2 lecture/4 studio
Prerequisite: None.
This is an introductory course in printmaking that will expose the student to various graphic techniques. The student will explore the processes of relief, intaglio, and screenprinting through application and appreciation. Recommended for graphic design majors and drawing and painting majors. (Formerly ART 16)
Transfer Credit:CSU;UC

ART 117  INTERMEDIATE PRINTMAKING  3 UNITS
Class hours:2 lecture/4 studio
Prerequisite: ART 110 or equivalent with a grade of Credit or “C” or higher.
This is a course designed for the student's investigation in the techniques of etching, collagography, and screenprinting. Related photographic techniques will be studied and applied further, such as photo-silkscreen, photo-etching, halftone and posterization technique, and use of the enlarger. (Formerly ART 17)
Transfer Credit:CSU;UC

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
ART 120  
TWO-DIMENSIONAL DESIGN  
3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: None.
This course will serve as an introduction to the elements of organization and problem solving in two-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 two-dimensional surfaces. The course will emphasize the use of line, shape, value, texture, and surface, in both black and white and color materials as they relate to design of a flat surface. The course is an intensive studio course which also emphasizes the use and comprehension of the vocabulary of two-dimensional design and its application to the visual image. (Formerly ART 20)
Transfer Credit: CSU; UC

ART 133A  
WATERCOLOR PAINTING  
3 UNITS
Class hours: 1 lecture/5 studio
Prerequisite: None.
This introductory course pursues the study of the various techniques and methods of watercolor as used by artists today: transparent, opaque, dry brush, glazing, mixed media, egg tempera, air brush, and colored pencils. Emphasis is placed on traditional, modern, and oriental approaches as relative to the watercolor techniques and practices. The student will be directed towards developing skills in painting of still life, landscape, figure, portrait, and abstraction. (Formerly ART 33.1)
Transfer Credit: CSU; UC

ART 133B  
WATERCOLOR PAINTING  
3 UNITS
Class hours: 1 lecture/5 studio
Prerequisite: ART 133A or equivalent with a grade of Credit or “C” or higher.
This course emphasizes new techniques, as well as additional experiences, in color theory, paint application, light logic, and perspective in watercolor landscape painting. (Formerly ART 35)
Transfer Credit: CSU; UC

ART 136  
PAINTING FOR ART MAJORS  
3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 110 or equivalent with a grade of Credit or “C” or higher.
Recommendation: ART 120 or equivalent with a grade of Credit or “C” or higher.
This is a course in painting designed specifically for art majors. Topics include use and manipulation of painting materials and color; depicting mood and sensation; expression of form, edge, and negative space; and devices in composition. Projects include creative thinking as applied to non-objective painting, formal invention, and symbolic imagery. Knowledge of art history is expanded through gallery and museum visits and assigned reading. This course may be taken for a maximum of 6 units. (Formerly ART 36)
Transfer Credit: CSU; UC

ART 144  
JEWELRY/ METALSMITHING  
3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: None.
Recommendation: None.
This is an introductory course covering the design and technical processes of jewelry and metalsmithing. Emphasis will be placed on fabrication techniques and their design potential. The implication and effects of the history and culture of jewelry and body ornamentation are learned through audio/visual lectures and museum visits. Projects include brooches, rings with stone settings, chains, etc. This class may be repeated for a maximum of 6 units. (Formerly ART 74)
Transfer Credit: CSU

ART 145  
JEWELRY CASTING AND MOLDS  
3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 144 or equivalent with a grade of Credit or “C” or higher.
This is the second course in a sequential program covering the design and technical processes of jewelry and metalsmithing. Emphasis will be placed on the continued development of skills in designing and fabrication of jewelry and metalsmithing. The techniques and projects covered are forging/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 class may be repeated for a maximum of 6 units. (Formerly ART 75)
Transfer Credit: CSU

ART 150 (CAN ART 6)
BEGINNING CERAMICS I 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: None.
Recommendation: None.
This course is designed as an introduction to the ideas, techniques, and tradition of the art of ceramics. This course may be taken for a maximum of 6 units. (Formerly ART 50)
Transfer Credit: CSU

ART 151
CERAMICS - WHEELTHROWING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: ART 150 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course builds on techniques learned in beginning Ceramics I. Emphasis is on the use of the potter's wheel. Glaze technology is introduced. This course may be taken for a maximum of 6 units. (Formerly ART 51.1)
Transfer Credit: CSU

ART 152
CERAMICS - HANDBUILDING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: ART 150 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course builds on techniques learned in Ceramics I. Emphasis is based on the use of complex hand-forming techniques. Glaze technology is included. This course may be taken for a maximum of 6 units. (Formerly ART 51.2)
Transfer Credit: CSU

ART 155
BEGINNING CERAMIC SCULPTURE 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 150 or equivalent with a grade of Credit or "C" or higher.
Recommendation: None.
This course is designed as an introduction to the ideas, techniques, and tradition of the art of ceramic sculpture. This course may be taken for a maximum of 6 units. (Formerly ART 55.1)
Transfer Credit: CSU

ART 156L
CERAMICS LAB 1 UNIT
Class hours: 4 lab. (17 weeks)
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
Recommendation: None.
This lab course is intended to complement the other courses in the ceramics curriculum. It is designed to give practical experience in the techniques and technology of ceramics, including handbuilding, wheel-throwing, sculpture, surface treatments, and glazing. The course will improve the skills and creativity of students enrolled in the ceramics courses. This course may be taken for a maximum of 4 units.
Transfer Credit: CSU

ART 156
CERAMICS LAB 1 UNIT
Class hours: 4 lab. (17 weeks)
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
Recommendation: None.
This course is a continuation of ART 162, Sculpture I. New ideas, techniques, and materials for making sculpture are introduced. This course may be taken for a maximum of 6 units. (Formerly ART 63)
Transfer Credit: CSU

ART 170
BEGINNING WOOD SCULPTURE I 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
This course covers the selection, preparation and use of hand tools as related to wood sculpture. The student investigates the properties and characteristics of wood as a basic three-dimensional design medium. Techniques such as knife carving, gouging, chiseling, rasping, texturing, sanding and finishing will be covered. This course may be taken for a maximum of 4 units. (Formerly ART 80)
Transfer Credit: CSU

ART 171
BEGINNING WOOD SCULPTURE II 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: ART 170 or equivalent with a grade of Credit or "C" or higher.
This course covers the use of hand tools and power equipment as related to creating wood objects. The designing of both traditional and contemporary wood-sculpture items will be studied. Areas of lamination, fabrication, and subtractive techniques in advanced projects will be learned. This course may be taken for a maximum of 4 units. (Formerly ART 81)
Transfer Credit: CSU

ART 180
CALLIGRAPHY I 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: None.
This foundation course explores the history, theory, and techniques which shape letterforms, past and present. Emphasis will be on developing skill and knowledge through the historical study of calligraphy and the manipulation of tools and materials. The Roman style will be studied through a modular approach beginning with linear fonts, then broad pen sans serif forms, and finally Humanist Bookhand. An appreciation for color, design, and the aesthetic qualities of letter forms will be stressed in their contemporary usage. This course may be taken for a maximum of 6 units. (Formerly ART 40)
Transfer Credit: CSU

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ART 181
CALIGRAPHY II 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 180 or equivalent with a grade of Credit or “C” or higher.
This course focuses on the development of the Italic letterforms in addition to the continued study of the historical development of letterforms, past and present. Emphasis will be on the continued in-depth development and refinement of calligraphic skills and knowledge. Various styles of Italic will be studied in conjunction with a review of the Roman styles of the previous semester. Calligraphy II will continue to stress an appreciation for the color, design, and aesthetic properties of quality letterforms in their contemporary usage. This course may be taken for a maximum of 6 units. (Formerly ART 41)
Transfer Credit:CSU

ART 182A
LETTERING AND TYPOGRAPHY 3 UNITS
Class hours: 2 lecture/ 4 studio
Prerequisite: None.
The exploration of lettering and typography, its creation, use and function in printing, packaging, publishing, and advertising constitute the basis for this course. Emphasis is on drawn letterforms with a view toward their historical development and with the objective of acquiring skill and sensitivity in their delineation and finish for reproduction. The classification of type styles will be learned and the basic elements of typography will be explored through practical studio exercises. (Formerly ART 42)
Transfer Credit:CSU

ART 182B
LETTERING AND TYPOGRAPHY II 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 182A or equivalent with a grade of Credit or “C” or higher.
The design and application of letterforms requiring increased technical skills and intensive experience in the use of current phototypesetting equipment and computer graphics programs provide the basis for this second semester of Lettering and Typography. Topics include illustrative lettering, phototypesetting, experimental typography, computer designed letterforms, digital typography and type design. (Formerly ART 42.1)
Transfer Credit:CSU

ART 183
INTRODUCTION TO ILLUSTRATION 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: ART 110 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
In this course students learn the principles and practices of illustration through the examination of artists and illustrators as well as the understanding of materials, techniques, and practical assignments faced by the illustrator. This course may be taken for a maximum of 6 units. (Formerly ART 113)
Transfer Credit:CSU

ART 183A
COMMERCIAL BRUSH LETTERING 1 UNIT
Class hours: 1 lecture/3 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course explores the history, theory and techniques of brush lettering with an emphasis on designing for commercial applications. The class will focus on hand lettering techniques with manipulation of traditional flat and pointed brushes. This course may be taken for a maximum of 2 units.
Transfer Credit:CSU

ART 183B
COPPERPLATE CALLIGRAPHY 1 UNIT
Class hours: 1 lecture/3 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This foundational course explores the history, theory, and techniques which shape letterforms, past and present. Emphasis will be on developing skill and knowledge through the historical study of calligraphy and the manipulation of tools and materials. The Copperplate style will be studied through a modular approach beginning with linear forms, then flexible pointed pen forms. An appreciation for color, design, and the aesthetic qualities of letterforms will be stressed in their contemporary usage. This course may be taken for a maximum of 2 units.
Transfer Credit:CSU

ART 184
GRAPHIC DESIGN I 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 182A or equivalent with a grade of Credit or “C” or higher.
Fundamental studies are conducted in the history, theories, techniques, and practices of graphic design. Emphasis will be placed on the application of basic design principles to graphic design problems in visual communications. Design solutions will explore the potential of layout and design, utilizing illustration, photography, typography, and symbology. (Formerly ART 44)
Transfer Credit:CSU

ART 185
RENDERING I 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 110 or equivalent with a grade of Credit or “C” or higher.
Beginning techniques in the delineation of representational subject matter are explored. Emphasis is on sharp focus drawing using black and white media such as pencils, ink, felt tips, as well as colored felt tips and Prismacolor pencils. This course is important to those interested in graphic design, industrial design, and technical illustration. (Formerly ART 45)
Transfer Credit:CSU

ART 186
COMPUTER GRAPHICS IN ART AND DESIGN 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: None.
This course covers the basic concepts and techniques of computer graphics. The principles of art and design are taught in a studio setting emphasizing hands-on experience. Students create original illustrations using vector-based graphics software. This course may be taken for a maximum of 6 units. (Formerly ART 48)
Transfer Credit:CSU

ART 188
DESIGN FOR DESKTOP PUBLISHING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: None.
This course covers page design and layout systems for desktop publishing. The principles and terminology of typography are stressed. The scanning of graphic material such as illustrations and photographs will be covered with regard to the requirements of the publishing industry. Hands-on experience is emphasized. This course may be taken for a maximum of 6 units. (Formerly ART 48.1)
Transfer Credit:CSU
### ART 189L COMPUTER GRAPHICS LAB 1 UNIT
Class hours: 3 lab
Prerequisite: None.
Corequisite: One of the following courses: ART 182A, ART 182B, ART 184, ART 186, ART 188, ART 192, ART 195, ART 196, ART 284, PHOT 110 or PHOT 112.
Recommendation: None.
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 for a maximum of 4 units.
Transfer Credit: CSU

### ART 192 DIGITAL IMAGING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course covers image editing of photographic media 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. This course may be taken for a maximum of 6 units. (Formerly ART 92)
Transfer Credit: CSU

### ART 194 MULTIMEDIA DESIGN 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
This course acquaints students with the use of multimedia programs and the tools they provide to create all featured interactive multimedia prototypes, applications, and presentations. Class work and lab assignments provide hands-on experience for the students. This course may be taken for a maximum of 6 units. (Formerly ART 94)
Transfer Credit: CSU

### ART 195 3D COMPUTER MODELING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
This course is an overview of interactive three-dimensional modeling and rendering techniques on the Macintosh. The course involves assignments emphasizing and understanding of modeling and rendering software tools, and animation concepts. This course may be taken for a maximum of 6 units. (Formerly ART 95)
Transfer Credit: CSU

### ART 196 INTRODUCTION TO DESIGNING WEB GRAPHICS 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 205 or equivalent with a grade of Credit or "C" or higher.
The course introduces students to the principles and design skills essential to designing web pages. The students will use web page creation software and the tools they provide to create full-featured-interactive web sites. This class may be taken for a maximum of 6 units. (Formerly ART 99/ART 96)
Transfer Credit: CSU

### ART 197 DIGITAL PAINTING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is an advanced technique, and using professional materials. This course may be repeated for a maximum of 6 units. (Formerly ART 14)
Transfer Credit: CSU

### ART 198 SCREENPRINTING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 117 or equivalent with a grade of Credit or "C" or higher.
The class emphasizes advanced skills, techniques, and historical knowledge of screenprinting. An important feature of the course will be the study of the materials, stencils, films, blockouts, photomechanical processes, and inks. Students will be required to complete particular aesthetic problems through their prints. (Formerly ART 18)
Transfer Credit: CSU

### ART 213 INTERMEDIATE LIFE DRAWING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 112 or equivalent with a grade of Credit or "C" or higher.
In this course students continue the process of learning to draw the live model. Students practice exploring the rhythm and design inherent in the human figure, seeing and understanding the space a form occupies, understanding the kinesthetics of anatomy, and learning the economy of good drawing technique. The history and evolution of drawing as an art form and contemporary purposes in figure drawing are discussed in lectures. This course may be taken for a maximum of 6 units. (Formerly ART 13)
Transfer Credit: CSU

### ART 214 SPECIAL STUDIES IN LIFE DRAWING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 213 or equivalent with a grade of Credit or "C" or higher.
This course offers advanced work in figure drawing. Emphasis is placed on the student's development of personal style. The pictorial space of the drawing is given the same importance as in a painting, and the student seeks to elevate the classroom sketch to a well designed and effective work of art. The course considers the relationship between the student's intentions in drawing to his or her work in other media, such as painting or sculpture. Focus is placed on the personal and creative aspects of drawing, and what a drawing communicates, developing an advanced technique, and using professional materials. This course may be repeated for a maximum of 6 units.
Transfer Credit: CSU

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various techniques of advanced etching, including grounds, aquatints, photo etching, and viscosity printing. Also, calligraphy, embossing, and color will be explored. Students will be required to deal with particular aesthetic problems and techniques. (Formerly ART 19) Transfer Credit: CSU; UC

ART 231
INTERMEDIATE PAINTING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 112 or equivalent with a grade of Credit or “C” or higher.
This course is designed for students who want a deeper understanding of painting: its history, theories, creative purposes, and technical skills. Through lectures, discussions, and studio work, students discover, articulate, and bring into being their own artistic identity and style. Practical assistance is given on an individual basis. Emphasis is placed on the student’s progress from idea to technical means and visual accomplishment. Students may initiate their own painting projects, or use what subject matter is presented to the class. This course may be taken for a maximum of 6 units. (Formerly ART 31)
Transfer Credit: CSU; UC

ART 232
PORTRAITURE: DRAWING/PAINTING THE HEAD 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 112 or equivalent with a grade of Credit or “C” or higher.
This course is an introduction to portraiture: its techniques, history, and social uses. Many genres of portraiture will be surveyed to analyze how they give expression to cultural and societal values. Formal portraiture, character stereotypes, images from popular culture, African and Asian masks, the face of the nude, expressionistic psychological portraiture, commercial portrait styles, and the self-portrait, all will be discussed and explored. Live models will pose. This course may be taken for a maximum of 6 units. (Formerly ART 32)
Transfer Credit: CSU; UC

ART 235
LIFE PAINTING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 112 or equivalent with a grade of Credit or “C” or higher.
This is a painting and lecture course which focuses on the live model as subject matter. The history and philosophy of the figure in art are discussed. Symbolic, expressionistic, allegorical, fantastic, narrative, and abstract styles are surveyed. Drawing and painting techniques and materials are explained. Individual and group critiques are utilized. This course may be taken for a maximum of 6 units. (Formerly ART 37)
Transfer Credit: CSU; UC

ART 238
SPECIAL STUDIES IN PAINTING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 136 or ART 237 or equivalent with a grade of Credit or “C” or higher.
This is an advanced course designed for individualized study by the experienced painter. The student is expected to research the historical and contemporary trends in art and the criticism which relate to his or her work. Discussion centers on how the student’s work communicates specific meaning and functions within the art world. Projects may be in traditional, transitional, or new forms of painting. This course may be taken for a maximum of 6 units. (Formerly ART 38)
Transfer Credit: CSU; UC

ART 239
PORTRAIT PAINTING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 130A or ART 232, or ART 237 or equivalent with a grade of Credit or “C” or higher.
This is a course in the history, theories, techniques, and practice of portrait painting. Creative imagination, color, space, and pictorial structure are included in the study of the portrait. Live models will be used. The student has the option of working in any drawing or painting medium. This course may be taken for a maximum of 6 units. (Formerly ART 39)
Transfer Credit: CSU; UC

ART 240
JEWELRY DESIGN FABRICATION 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 145 or equivalent with a grade of Credit or “C” or higher.
This is the third course in a sequential program covering the design and technical processes of jewelry and metalsmithing. The techniques and projects covered are fabricating a die-formed container, stone setting, mold making, and lost wax casting of multiples. The study of the history and culture of jewelry and body ornamentation is continued through audio/visual lectures and museum and gallery visits. This class may be repeated for a maximum of 6 units. (Formerly ART 76)
Transfer Credit: CSU

ART 248
HOLLOW FORMING
JEWELRY PROCESSES 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 246 or equivalent with a grade of Credit or “C” or higher.
This is the fourth and most advanced course in a sequential program covering the design and technical processes of jewelry and metalsmithing. The techniques and projects covered in this course include designing a suite/set of wearable objects and a set of flatware. Specialized advanced techniques and processes will be taught to match the student’s specific artistic objectives and projects. The study of the history and culture of jewelry and metalsmithing is continued through audio/visual lectures and museum, gallery, commercial, and industrial site visits. This class may be repeated for a maximum of 6 units. (Formerly ART 78)
Transfer Credit: CSU

ART 252
CERAMICS - FORM AND TECHNIQUE 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 151 or ART 152 or equivalent with a grade of Credit or “C” or higher.
This course is a continuation of ceramics wheel throwing and/or handbuilding. Emphasis is placed on the further development of the techniques and forms explored in ART 151 and/or ART 152. Clay technology is introduced. This course may be taken for a maximum of 6 units. (Formerly ART 52)
Transfer Credit: CSU; UC

ART 253
CERAMICS - FORM AND CONTENT 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 252 or equivalent with a grade of Credit or “C” or higher.
This course is designed for individualized study by the ceramist with at least three semesters of prior experience at the college level. Students will be expected to write a proposal of work to be accomplished during the semester. Glaze technology and firing are explored in greater depth. This course may be taken for a maximum of 6 units. (Formerly ART 53)
Transfer Credit: CSU; UC

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
**ART 255**
**INTERMEDIATE CERAMIC SCULPTURE** 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 155 or equivalent with a grade of Credit or "C" or higher.
This course is a continuation of ART 155. New ideas, techniques and approaches to making ceramic sculpture are introduced. This course may be taken for a maximum of 6 units. (Formerly ART 55.2)
Transfer Credit: CSU; UC

**ART 264**
**SCULPTURE - STONE CARVING** 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: None.
Corequisite: None.
Recommendation: ART 163 or equivalent with a grade of Credit or "C" or higher strongly recommended.
This course is designed to extend the student's knowledge and skill in the specific discipline of subtractive sculpture. The student will learn how to make sculpture by traditional stonemaking techniques. This course may be taken for a maximum of 9 units. (Formerly ART 64)
Transfer Credit: CSU; UC

**ART 270**
**WOOD LATHE ART** 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: ART 171 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: ART 120 or equivalent with a grade of Credit or "C" or higher.
This course covers wood lathe processes as applied to creating art objects. The student learns the two main methods of lathe turning: scraping and shear cutting. Project design, aesthetics, wood selection and finishing are studied. This course may be repeated for a maximum of 4 units. (Formerly ART 69.82/ART 82)
Transfer Credit: CSU

**ART 271**
**CARVING TOOL MAKING** 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: ART 171 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course involves techniques in designing and making wood carving tools. Types covered include knives, chisels, and gouges. Steel selection and heat treating are also covered. This course may be repeated for a maximum of 4 units. (Formerly ART 83)
Transfer Credit: CSU

**ART 284**
**GRAPHIC DESIGN II** 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 184 or equivalent with a grade of Credit or "C" or higher.
Continued studies in the theories, techniques, and practices of graphic design for visual communications are undertaken. Emphasis is on more advanced techniques and studies of problems in visual communications. Design solutions will be taken from the initial concept through refinement to camera-ready art for print production. Students acquire expertise in the use of process cameras, phototypesetters, and additional equipment. (Formerly ART 44.1)
Transfer Credit: CSU

**ART 285**
**RENDERING II** 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 185 or equivalent with a grade of Credit or "C" or higher.
Experimental and advanced techniques in the delineation of representational subject matter emphasize the use of color in creating sharp focus drawing. Pencils, colored inks, felt tips, watercolor, gouache, and acrylic will be used. This class is important for those interested in graphic design, industrial design, and technical illustration. (Formerly ART 45.1)
Transfer Credit: CSU

**ART 287A**
**LETTER ARTS** 2 UNITS
Class hours: 1 lecture/3 studio
Prerequisite: ART 181 or equivalent with a grade of Credit or "C" or higher.
This intermediate course of study focuses on normal, active, and cannibal 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. (Formerly ASTR 1.1)
Transfer Credit: CSU; UC

**ART 287B**
**ROMAN CALLIGRAPHY** 2 UNITS
Class hours: 1 lecture/3 studio
Prerequisite: ART 287A or equivalent with a grade of Credit or "C" or higher.
This course is designed to develop analytical methods and to increase performance skills in the evaluation of letter structure and the shaping of historical letterform styles. Students will develop the ability to modify historical styles of letterform for contemporary applications in aesthetic and communicative areas. Expertise and knowledge will be expanded through the exploration of tools, materials, and techniques. This course may be taken for a maximum of 6 units. (Formerly ART 69.4/ART 47.1)
Transfer Credit: CSU

**ASTRONOMY**
(Science/Engineering/Math Division)

**ASTR 101**
**ELEMENTARY ASTRONOMY** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This is an introductory survey course in the general principles and fundamentals of astronomy. It is designed primarily for non-science majors, physical science general education credit at transfer institutions. (Formerly ASTR 1)
Transfer Credit: CSU; UC

**ASTR 102**
**INTRODUCTORY ASTRONOMY: STARS AND THE UNIVERSE** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is a non-technical introduction to astronomy, with emphasis on 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. (Formerly ASTR 1.1)
Transfer Credit: CSU; UC

**ASTR 103**
**INTRODUCTORY ASTRONOMY: THE SOLAR SYSTEM** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is a non-technical introduction to astronomy, with emphasis on the Sun, planets, moons, and smaller bodies which...
make up the solar system. Topics include the nature of light, the atom, telescopes, an examination of the planets and their moons and rings, the origin of the solar system, comets, asteroids, and meteors, catastrophic events, and the search for planets around other stars. This course is not open to students with credit in ASTR 101. (Formerly ASTR 1.2) Transfer Credit:CSU;UC

ASTR 105L
OBSERVATIONAL ASTRONOMY 1 UNIT
Class hours:3 lab
Prerequisite: ASTR 101, ASTR 102, ASTR 103 OR ASTR 106 or equivalent with a grade of Credit or “C” or higher or concurrent enrollment.
Corequisite: None.
Recommendation: None.
This is a laboratory course in practical astronomical observations and studies designed for the student with an interest in the use of telescopes and instruments. An opportunity will be provided for additional study as a supplement to the lecture course. Occasional evening observing sessions are required. (Formerly ASTR 5/ASTR 101L)
Transfer Credit:CSU;UC

ASTR 106
HISTORY OF ASTRONOMY 3 UNITS
Class hours:3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course explores humanity’s changing view of the cosmos and its place in 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

AUTO/MOTIVE COLLISION REPAIR (AUTOBODY)
(Technology Division)

AB 50A
BODY TRIM AND MINOR REPAIRS 1 UNIT
Class hours:0.75 lecture/1.25 lab
Prerequisite: AB 50A or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This is one in a series of hands-on short courses which prepares students for employment as a collision repair technician apprentice. Major emphasis will be placed on removal and replacement of external panels, bumpers, lights, and trim. Repair of minor body panel dents and the use of power and hand tools will be covered. This course may be taken for a maximum of 2 units.

AB 50B
PANEL REPLACEMENT 1 UNIT
Class hours:0.75 lecture/1.25 lab
Prerequisite: AB 50A or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This is one in series of hands-on short courses which prepares students for employment as a collision repair technician apprentice. Major emphasis will be placed on removal and replacement of more complex external panel assemblies, doors, tailgates, rear hatches etc. Content will also include repair of more complex non-structural body panels, introduction of additional power and hand tools, water leak and wind noise detection and correction. This course may be taken for a maximum of 2 units.

AB 50C
STRUCTURAL REPAIR SET-UP 1 UNIT
Class hours:0.75 lecture/1.25 lab
Prerequisite: AB 50A or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This is one in a series of hands-on short courses which prepares students for employment as a collision repair technician apprentice. Major emphasis will be placed on diagnosis and repair of structural damage and welding. A variety of methods of measuring structural damage will be utilized including trams, gauges and laser measuring devices. This course may be taken for a maximum of 2 units.

AB 51
NON-STRUCTURAL DAMAGE REPAIR 4.5 UNITS
Class hours:3 lecture/5 lab
Prerequisite: None.
This course will covers basic aspects of the automotive collision repair trade. Major emphasis is placed on orienting the student to safe use of specific automotive welding procedures, use of basic power and hand tools, use of fillers, and metal straightening techniques. It also includes discussion of automotive design, nomenclature, and non-structural damage analysis. (Formerly AB 11)

AB 52
STRUCTURE DAMAGE REPAIR 4.5 UNITS
Class hours:3 lecture/5 lab
Prerequisite:AB 51 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course is part of an instructional package for the student who wishes additional knowledge in automotive collision repair. It introduces the student to unitized and space-frame construction, high strength steel components, chassis design, sheet metal straightening techniques, alignment and installation of body parts. Also included is safety related to electrical problems, introduction of plastic components and continued welding and metallurgical experience. This course may be taken for a maximum of 9 units. (Formerly AB 21)

AB 53
SUSPENSION, ALIGNMENT AND POWER TRAIN DAMAGE 4.5 UNITS
Class hours:3 lecture/5 lab
Prerequisite:AB 51 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course introduces students to wheel alignment, suspension systems, and power train problems related to automotive collisions. Related topics include: frame straightening systems, measurement and gauging for damage, cooling and electrical components, and continued welding and metallurgical experience. This course may be taken for a maximum of 9 units. (Formerly AB 31.1)

AB 54
ADVANCED DESIGN AUTOMOTIVE PANEL REPAIR 4.5 UNITS
Class hours:3 lecture/5 lab
Prerequisite:AB 51 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course emphasizes alignment and repair of advanced design automotive body panels such as tempered sheet metal, aluminum, plastics, fiberglass and composites. Additional topics include repair and installation of structural members, removal and replacement of electrical and electronic components and related interior parts. This course may be taken for a maximum of 9 units. (Formerly AB 41)

AB 55 STRUCTURAL PANEL REPLACEMENT 4.5 UNITS
Class hours: 3 lecture/5 lab
Prerequisite: AB 51 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.

This course emphasizes frame and structural repair. Instruction includes repair and replacement of structural body panels, removal and replacement of power train and supports, gauging and analysis of major structural damage, plus the measuring and alignment of strut towers. Appropriate safety related instructions would be included in each segment. This course may be taken for a maximum of 9 units. (Formerly AB 42)

AB 56 NON-STRUCTURAL AUTOMOTIVE WELDING 2 UNITS
Class hours: 1.5 lecture/2.5 lab
Prerequisite: None.

This course introduces students to oxy-acetylene, Gas Metal Arc Welding (GMAW), stick arc, and pressure resistance welding. It is designed for the student who is presently employed in the automotive field. Related technical subjects include safety, testing of weld joints, design, strength of materials, process selection, cutting methods and metals identification. A major focus of this course is to prepare students to complete the I-CAR GMAW Certification Test. (Formerly AB 12)

AB 57 STRUCTURAL AUTOMOTIVE WELDING 2 UNITS
Class hours: 1.5 lecture/2.5 lab
Prerequisite: AB 56 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.

This course further develops student skills in the use of Gas Metal Arc Welding (GMAW) equipment and methods related to the repair, maintenance and alteration of the automobile structure. Special emphasis will be placed upon GMAW of structural high strength steel, aluminum welding, plasma arc and oxyacetylene cutting. A major focus of this course is to prepare students to complete the I-CAR GMAW Certification Test. This course may be taken for a maximum of 6 units. (Formerly AB 22)

AB 58 COLLISION REPAIR UPDATE 4.5 UNITS
Class hours: 3 lecture/5 lab
Prerequisite: AB 51, AB 52, and AB 53 or equivalent courses with grades of Credit or “C” or higher, or appropriate work experience. AB 54 may be substituted for AB 53.

This course increases skills and knowledge by updating the student in areas of their choice. Update areas would include refinishing of plastics, advanced design automotive components, metal finishing, complex frame and structural repair, and advanced welding. This course may be taken for a maximum of 13.5 units. (Formerly AB 48/AB 70)

AB 60A SPOT REFINISHING 1 UNIT
Class hours: 0.75 lecture/1.25 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.

This is one in a series of hands-on short courses which prepares students for employment as an automotive refinishing apprentice. Major emphasis will be placed on paint application problems and finish defects, causes and cures. This course may be taken for a maximum of 2 units.

AB 60B MIXING AND APPLICATION OF PAINT 1 UNIT
Class hours: 0.75 lecture/1.25 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.

This is one in a series of hands-on short courses which prepares students for employment as an automotive refinishing apprentice. Major emphasis will be placed on bare metal preparation, mixing and application of primers and topcoats, and blending of paint finishes. This course may be taken for a maximum of 2 units.

AB 60C PAINT DEFECTS: CAUSES AND CURES 1 UNIT
Class hours: 0.75 lecture/1.25 lab
Prerequisite: AB 60A and AB 60B or equivalent with grades of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.

This is one in a series of hands-on short courses which prepares students for employment as an automotive refinishing apprentice. Major emphasis will be placed on solving paint application problems and finish defects, causes and cures. This course may be taken for a maximum of 2 units.

AB 61 PREPARATION AND SPOT REFINISHING 4.5 UNITS
Class hours: 3 lecture/5 lab
Prerequisite: AB 51 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.

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, precoat, and basic material problems encountered in today's refinishing market. This course may be taken for a maximum of 9 units. (Formerly AB 25)

AB 62 OVERALL AND MULTI-COAT REFINISHING 4.5 UNITS
Class hours: 3 lecture/5 lab
Prerequisite: AB 51 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.

This course develops the skills of the professional automotive refinisher in Overall Multi-Coat and Refinishing. Students will be instructed in the art of tinting colors, spot repair of factory and after-market multi-coat finishes, overall refinishing, interior/exterior care and maintenance, and the refinishing of plastic components. The course includes the testing, research and development of current refinishing materials. I-CAR certification criteria will be incorporated in the training and discussions. This course may be taken for a maximum of 9 units. (Formerly AB 35)

AB 63 PRODUCTION REFINISHING 4.5 UNITS
Class hours: 3 lecture/5 lab
Prerequisite: AB 51 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.

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Corequisite: None. Recommendation: None.
In this course students learn to prepare and refinish several vehicles simultaneously. Areas covered include repair of minor body dings, paint preparation, mixing of multiple colors, plus the masking and painting of up to three separate vehicles of varying models, color, and types. This course provides students with hands-on techniques for increasing the volume of vehicles processed in the professional automotive refinishing environment. This course may be taken for a maximum of 18 units. (Formerly AB 35.1)

AB 65 MIXING AND ADJUSTING COLOR 2 UNITS
Class hours: 1.5 lecture/2.5 lab
Prerequisite: None.
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 spraying, blending techniques, compatibility, troubleshooting of materials, and paint chemistry. This course may be taken for a maximum of 6 units. (Formerly AB 33.1/AB 2)

AB 66 LETTERING, STRIPING AND DESIGN 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
This course trains students in the arts of automotive lettering, graphic design, and pinstriping. Students work with lines, colors, and harmonizing/contrasting concepts to create special effects on commercial and passenger vehicles using a wide range of materials and techniques. Included in this course are the use of computer-generated graphics, stencil making, hand pin-striping, and air-brushing. This course may be taken for a maximum of 5 units. (Formerly AB 45)

AB 68 REFINISHING UPDATE 4.5 UNITS
Class hours: 3 lecture/5 lab
Prerequisite: AB 61, AB 62, and AB 63 or equivalent with grades of Credit or “C” or higher, or appropriate work experience.
This course is designed to increase skill and knowledge as well as update students in automotive refinishing areas of their choice. It will emphasize automotive refinishing and plastic repair techniques, panel and spot painting, sanding and preparation techniques, and overall and multi-coat painting. This course may be taken for a maximum of 18 units. (Formerly AB 49/AB 71)

AB 73/74 AUTOMOTIVE COLLISION REPAIR OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Automotive Collision Repair work experience. This course may be taken for a maximum of 18 units. (Formerly AB 49/AB 71)

Class hours: 15 hours of employment per week for Automotive Collision Repair work experience. The employment must be in a job related to the student’s educational goal.
Corequisite: Concurrent enrollment in the Automotive Collision Repair vocational program with 7 or more units including occupational work experience.
Work experience/career internship provides the opportunity for Automotive Collision Repair students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication and coordination among the student/workers, the college, and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to the major and job skills must be completed on the job/training site. These courses may be taken for a maximum of 15-16 units.

AB 80 AUTobody CUSTOMER SERVICE 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course focuses on effective customer service in an automotive collision repair facility. Students learn appropriate use of collision repair industry terminology, measuring and improving levels of customer service, interpreting body language, conflict resolution, telephone and in-person communication skills, personal conduct and business ethics, and the completion of paperwork related to autobody customer service positions. This course may be taken for a maximum of 8 units. (Formerly AB 50)

AB 80A VEHICLE STAGING 1 UNIT
Class hours: 0.75 lecture/1.25 lab
Prerequisite: None.
Corequisite: None.
Limitation of Enrollment: Students must have valid and current driver’s license and proof of appropriate automobile insurance. This is one in a series of hands-on short courses which prepares students for employment as a porter in an automotive shop operation. Major emphasis will be placed on safe driving and parking, vehicle clean up, customer contact, and the staging of vehicles within an automotive repair facility at the start and end of each day. This course may be taken for a maximum of 2 units.

AB 80B DAMAGE ANALYSIS AND AUTOMOTIVE SYSTEMS 1 UNIT
Class hours: 0.75 lecture/1.25 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course focuses on effective customer service in an automotive collision repair facility. Students learn appropriate use of collision repair industry terminology, measuring and improving levels of customer service, interpreting body language, conflict resolution, telephone and in-person communication skills, personal conduct and business ethics, and the completion of paperwork related to autobody customer service positions. This course may be taken for a maximum of 2 units.

AB 80C VEHICLE TYPES AND CUSTOMER RELATIONS 1 UNIT
Class hours: 0.75 lecture/1.25 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course focuses on effective customer service in an automotive collision repair facility. Students learn appropriate use of collision repair industry terminology, measuring and improving levels of customer service, interpreting body language, conflict resolution, telephone and in-person communication skills, personal conduct and business ethics, and the completion of paperwork related to autobody customer service positions. This course may be taken for a maximum of 2 units.

AB 84 PRODUCTION MANAGEMENT 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course focuses on production management and improving workflow in automotive repair facilities. The course includes job

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AB 88 
ESTIMATING AND MANAGEMENT UPDATE 3 UNITS
Class hours: 2.5 lecture/1.5 lab
Prerequisite: Nine units of collision repair estimating and/or management or equivalent with grades of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course increases skills and knowledge in collision repair estimating, management, and customer relations for students considering a career in the automotive repair industry. It includes computerized automotive damage estimating, shop management, customer relations, and communications. This course may be taken for a maximum of 12 units. (Formerly AB 49.1/AB 72)

AB 181
NON-STRUCTURAL DAMAGE ESTIMATING 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: AB 51 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course is designed to develop skills in effective non-structural collision damage estimating. Emphasis is placed on body construction types and designs, welding and repair methods, mechanical and suspension components, and safety systems as related to damage estimating. Students complete hand-written estimates itemizing cost of labor, materials, and parts required to restore vehicles to pre-accident condition. Areas of training include the basic estimating process, hand-written estimates, and automotive systems analysis, body and fender repair times, industry standard times for part replacements, and procedure page logic (P-Page Logic) from collision estimating guides. Computer estimating is introduced as students demonstrate increased estimating proficiency. This course may be taken for a maximum of 6 units. (Formerly AB 24/AB 1)
Transfer Credit: CSU

AB 182
STRUCTURAL DAMAGE ESTIMATING 3 UNITS
Class hours: 2.5 lecture/1.5 lab
Prerequisite: AB 181 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course extends student skills in effective collision damage estimating. The course presents the wide range of skills needed to effectively inspect and analyze structural damage to vehicles, determine the extent of damage and select preferred methods of repair. Students will write handwritten and computerized damage reports, itemizing labor, materials, and parts costs required to restore the vehicle pre-accident condition. Additional areas of training include automotive industry standards, rules and regulations, identification of estimator job functions, and methods of determining levels of customer service index (CSI). Electronic estimating skills will be developed. This course may be taken for a maximum of 6 units. (Formerly AB 34.1/AB 82)
Transfer Credit: CSU

AB 287
ADVANCED COLLISION REPAIR MANAGEMENT 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course includes presentation of the wide range of skills required to effectively direct management and promote a multi-location collision repair facility. Areas of advanced training include rules and regulations related to the automotive repair industry, job costing, equipment and material procurement, facility cost analysis, department operations, safety, employee and right-to-know issues, warranties, customer satisfaction, licensing and certification, from the perspective of consolidator and/or franchise body shop operations. This course may be taken for a maximum of 6 units. (Formerly AB 51/AB 85)
Transfer Credit: CSU

AUTOMOTIVE MECHANICAL REPAIR TECHNOLOGY
(Technology Division)

AUTO 1
ENGINE MAINTENANCE 0 UNIT
Class hours: 5 lecture/1 lab (3 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a fundamental class in automotive engines, dealing with maintenance of the modern automobile. Emphasis is on the

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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. (Formerly AUTO 1.1)

**AUTO 2**

**FUEL SYSTEMS**

Class hours: 5 lecture/1 lab (3 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a fundamental class 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 and systems and enter the work environment with basic skills. (Formerly AUTO 1.2)

**AUTO 3**

**LUBRICATION AND COOLING**

Class hours: 5 lecture/1 lab (3 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a fundamental class 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. (Formerly AUTO 1.3)

**AUTO 4**

**ELECTRICAL SYSTEMS**

Class hours: 5 lecture/1 lab (3 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a fundamental class 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 work environment with basic skills. (Formerly AUTO 1.4)

**AUTO 5**

**BRAKES AND SUSPENSION**

Class hours: 5 lecture/1 lab (3 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a fundamental class 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. (Formerly AUTO 1.5)

**AUTO 6**

**TRANSMISSION AND DRIVE TRAIN**

Class hours: 5 lecture/1 lab (3 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a fundamental class 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. (Formerly AUTO 1.6)

**AUTO 7**

**THERMODYNAMICS**

Class hours: 5 lecture/1 lab (3 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a fundamental class in automotive thermodynamics, 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 thermodynamics and systems and enter the work environment with basic skills. (Formerly AUTO 1.7)

**AUTO 8**

**ELECTRONIC ENGINE CONTROLS EEC 3 & 4**

Class hours: 1 lecture
Prerequisite: None.
A theory/practical course in the operation and diagnosing of Ford electronic engine controls, including driveability problem areas such as electronic ignition, feedback carburetion, onboard diagnostic systems, and electronic fuel injection. (Formerly AUTO 1.8)

**AUTO 9**

**CHRYSLER ELECTRONIC FUEL INJECTION**

Class hours: 1 lecture
Prerequisite: None.
A theory/practical course in the operation and diagnosing of Chrysler electronic engine controls, including driveability problem areas such as electronic ignition, feedback carburetion, onboard diagnostic systems, and electronic fuel injection. (Formerly AUTO 1.9)

**AUTO 10**

**GENERAL MOTORS FUEL INJECTION**

Class hours: 1 lecture
Prerequisite: None.
A theory/practical course in the operation and diagnosing of General Motors electronic engine controls, including driveability problem areas such as electronic ignition, feedback carburetion, onboard diagnostic systems, and electronic fuel injection. (Formerly AUTO 1.10)

**AUTO 11**

**FOUR WHEEL ALIGNMENT**

Class hours: 1 lecture/demonstration
Prerequisite: None.
Theory/practical course on the principles of four wheel alignment. Computerized equipment will be used to demonstrate advanced shop procedures. (Formerly AUTO 1.11)

**AUTO 12**

**GENERAL MOTORS CLIMATE CONTROL**

Class hours: 1 lecture
Prerequisite: None.
A theory/practical course in the operation and diagnosis of General Motors control systems; trouble shooting, testing and repair techniques will be included. (Formerly AUTO 1.12)

**AUTO 13**

**SPECIALIZED ELECTRONICS TRAINING**

Class hours: 2.25 lecture/2.25 lab
Prerequisite: None.
This course is a study of the principles of automotive electronics to include fundamentals, circuits, meter use, repair, and microprocessors. (Formerly AUTO 1.13)

**AUTO 14**

**IMPORT FUEL INJECTION SYSTEMS**

Class hours: 1 lecture
Prerequisite: None.
A theory/practical course in the operation and diagnosing of Nissan, Toyota, and Bosch electronic engine controls, including driveability problem areas such as electronic ignition, feedback carburetion, onboard diagnostic systems, and electronic fuel injection. (Formerly AUTO 1.14)

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This is a theory/practical course in electricity and automotive electronic systems, such as batteries, Ford audio systems, and supplemental restraints. The content will be presented on a single manufacturer’s product line. This course may be taken for a maximum of 5 units.

AUTO 35
FORD MAINTENANCE AND LIGHT REPAIR FOR STEERING AND SUSPENSION SYSTEMS 2.5 UNITS
Class hours: 4 lecture/4 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a theory/practical course in basic steering and suspension on a single manufacturer’s car line. Included are operating principles, component description, diagnosis, repair, and service adjustments. This course may be taken for a maximum of 5 units.

AUTO 36
FORD MAINTENANCE AND LIGHT REPAIR FOR BRAKE SYSTEMS 2.5 UNITS
Class hours: 4 lecture/4 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a theory/practical course in basic brake and anti-lock brakes on a single manufacturer’s car line. Included are operating principles, component description, diagnosis, repair, and service adjustments. This course may be taken for a maximum of 5 units.

AUTO 37
FORD MAINTENANCE AND LIGHT REPAIR FOR CLIMATE CONTROL SYSTEMS 2.5 UNITS
Class hours: 4 lecture/4 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is a study of the principles of automotive air conditioning systems. The tools, skills, and processes necessary to perform the most common and essential air conditioning service procedures are studied and demonstrated in the shop. All instruction will be done on a single manufacturer’s unit. This course may be taken for a maximum of 5 units.

AUTO 50
INTRODUCTION TO AUTOMOTIVE 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This introductory course deals with the basic principles of the modern automobile with emphasis on operating principles. Major areas of instruction will include electrical, engine, transmission, brake and accessory systems. The course is designed as an entry level automotive offering so students may survey the automotive service industry. (Formerly AUTO 10)

AUTO 51
AUTOMOTIVE AIR CONDITIONING 4 UNITS
Class hours: 10 lecture/10 lab (6 weeks)
Prerequisite: AUTO 231 or equivalent with a grade of Credit or “C” or higher.
This course is designed to develop the student into an expert in 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. (Formerly AUTO 18.1)

AUTO 52
AUTOMOTIVE PRODUCT ANALYSIS 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is one in a series of GM PASS courses designed to bring the student to an entry-level position as a sales consultant within the General Motors dealership organization. This course develops product knowledge and consumer benefit from a product, financing and sales practices perspective. Emphasis is on GM automobile product line mix and competitive advantages. This course is designed to enhance personal skills in marketing and selling within the GM dealership sales department organization. (Formerly AUTO 69.14/AUTO 81)

AUTO 53
AUTOMOTIVE GM / ADVANCED CONSULTATIVE SELLING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: AUTO 73/74 or equivalent student internship with GM dealership, and BA 121 or equivalent with grades of Credit or “C” or higher.
This course is one in a series of GM PASS courses designed to bring the student to an entry-level position as a sales consultant within the General Motors dealership organization. It introduces the participants to the advanced skills necessary to begin selling automobiles through more pro-active customer-oriented sales efforts. Emphasis is placed on the development and practice of advanced professional sales techniques in the area of consultative value selling. (Formerly AUTO 69.15/AUTO 82).

AUTO 54
INTRODUCTION TO ELECTRIC VEHICLES 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: None.
Corequisite: None.
This course introduces the student to the world of Electric Vehicle Conversions. Students will be instructed with alternatives to gasoline powered vehicular travel and to the specific advantages of Electric Powered Automobiles. Topics to be included are: the process of conversion of a gas-powered vehicle to electric power, including the testing, assembly, operation and maintenance of EV’s, the disassembly and re-assembly of an EV, introduction to battery and charging systems, optional power accessories and EV drive systems. Appropriate safety related instructions will be included in each segment. This course may be repeated for a total of 8 units. (Formerly AB 69.9/AUTO 90)

AUTO 55
ADVANCED TECHNOLOGY ELECTRIC VEHICLES 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: None.
Corequisite: None.
This course develops students skills in electric vehicle conversions and introduces them to advanced technology EV’s and purpose-built EV’s. Students will work with hybrid electric vehicles and advanced design EV’s. Topics included are the conversion process of kit cars to electric power, including the
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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 for a maximum of 8 units. (Formerly AB 69.8/AUTO 91)

AUTO 73/74
AUTOMOTIVE MECHANICAL REPAIR OCCUPATIONAL
WORK EXPERIENCE 3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Automotive Mechanical Repair work experience 73 or 20 hours of employment per week for Automotive Mechanical Repair work experience 74. The employment must be in a job related to the student's educational goal. Corequisite: (1) Enrollment in the Automotive Mechanical Repair vocational program with 7 or more units including occupational work experience.

Work experience/career internship provides the opportunity for Automotive Mechanical Repair students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to the major and job skills must be completed on the job/training site. These courses may be taken for a maximum of 15-16 units.

AUTO 100
AUTOMOTIVE MAINTENANCE AND OPERATION 4 UNITS
Class hours: 3 lecture, 3 lab
Prerequisite: None.
Basic class dealing with the selection and maintenance of the modern automobile. Emphasis is on the basic operating principles. (Formerly IA 15/AUTO 1) Transfer Credit: CSU

AUTO 120
AUTOMOTIVE LUBRICATION, BRAKES AND WHEEL ALIGNMENT 5 UNITS
Class hours: 4 lecture/4 lab
Prerequisite: AUTO 100 or equivalent with a grade of Credit or “C” or higher or employed technician.

This is a theoretical and practical course in basic alignment, brakes, steering, and suspension. It includes operating principles, component description, diagnosis, repair, and adjustments. Alignment instruction includes electronic four wheel alignment. This course may be taken for a maximum of 10 units. (Formerly AUTO 12) Transfer Credit: CSU

AUTO 121
AUTOMOTIVE ALIGNMENT BRAKE AND SUSPENSION 6 UNITS
Class hours: 10 lecture/10 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: Concurrent enrollment in AUTO 73/74.

This is a theoretical and practical course in basic alignment, brakes, steering, and suspension on a single manufacturer's car line. Included are operating principles, component description, diagnosis, repair, and service adjustments. This course is designed to accompany work experience in this trade. (Formerly AUTO 20.2/AUTO 12.1) Transfer Credit: CSU

AUTO 130
AUTOMOTIVE ELECTRICITY 5 UNITS
Class hours: 4 lecture/4 lab
Prerequisite: AUTO 100 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.

This is a theoretical and practical course in basic electricity and automotive electrical systems such as battery, starting, charging, and electronic ignition. Test equipment and computer systems will also be covered. (Formerly AUTO 13) Transfer Credit: CSU

AUTO 131
AUTOMOTIVE ELECTRICITY 7 UNITS
Class hours: 12 lecture/8 lab (9 weeks)
Prerequisite: AUTO 121 or equivalent with a grade of Credit or “C” or higher.
Corequisite: AUTO 73/74.

This is a theoretical and practical course in basic electricity and automotive electrical systems, such as battery, starting, charging, and electronic ignition systems. The content will be presented on a single manufacturer's product line. (Formerly AUTO 13.1) Transfer Credit: CSU

AUTO 140
AUTOMOTIVE ENGINES 5 UNITS
Class hours: 4 lecture/4 lab
Prerequisite: AUTO 100 or equivalent with a grade of Credit or “C” or higher.

A theoretical and practical course in Automotive Engine repair to include operating principles and descriptions of all components. The major content will be on diagnosis and measurement. Complete disassembly and reassembly of engines will be accomplished. (Formerly AUTO 11/AUTO 14) Transfer Credit: CSU

AUTO 141
AUTOMOTIVE ENGINES 4 UNITS
Class hours: 10 lecture/10 lab (6 weeks)
Prerequisite: AUTO 100 and AUTO 121 or equivalent with grades of Credit or “C” or higher.
Corequisite: AUTO 73/74.
Recommendation: None.

A theoretical and practical course in Automotive Engine repair to include operating principles and descriptions of all components. The major content will be on diagnosis and measurement. Complete disassembly and reassembly of engines will be accomplished. Course content will be presented on a single manufacturer's engine. (Formerly AUTO 14.1) Transfer Credit: CSU

AUTO 150
AUTOMOTIVE MACHINE SHOP I 5 UNITS
Class hours: 4 lecture/4 lab
Prerequisite: AUTO 100 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.

This course is designed to teach students the basic operations used in the automotive machine shop. It concentrates on cylinder head, cylinder block, and piston and connecting rod assemblies. An overview of other related operations will be included. This course may be taken for a maximum of 10 units. (Formerly AUTO 15) Transfer Credit: CSU

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175
AUTO 160
AUTOMOTIVE POWER TRAIN 5 UNITS
Class hours:4 lecture/4 lab
Prerequisite: AUTO 100 or equivalent with a grade of Credit or "C" or higher.
This course is a study of the principles of the automotive power systems—clutch, manual and automatic transmission, transaxles, transfer cases, driveline, drive-axle, differential, and all wheel drive systems and service, including diagnosis and service. This course may be taken for a maximum of 10 units. (Formerly AUTO 16)
Transfer Credit:CSU

AUTO 161
AUTOMOTIVE POWER TRAIN 6 UNITS
Class hours:10 lecture/10 lab (9 weeks)
Prerequisite: AUTO 231 or equivalent with a grade of Credit or "C" or higher.
Corequisite: AUTO 73/74.
This course is a study of the principles of the automotive power systems—clutch, manual and automatic transmission, transaxles, transfer cases, driveline, drive-axle, and differential including diagnosis and service. This course is taught using a single manufacturer’s components and materials. (Formerly AUTO 16.1)
Transfer Credit:CSU

AUTO 170
EMISSION CONTROL SYSTEMS - 1997 STANDARDS 5 UNITS
Class hours:4 lecture/4 lab
Prerequisite: AUTO 100 or equivalent with a grade of Credit or "C" or higher.
One year automotive experience and/or automotive education credits equaling nine semester (14 quarter units) or 180 hours at a trade school. The course work must include, but is not limited to, the following automotive areas: basic electricity, fuel systems, and engine performance (tune-up).
This course gives the advanced automotive student exposure to the current methods, devices, and manufacturers of automotive emission control systems. It provides the student with an opportunity to obtain an advanced emission specialist technician license. This course may be taken for a maximum of 10 units. (Formerly AUTO 17)
Transfer Credit:CSU

AUTO 180
AUTOMOTIVE AIR CONDITIONING 4 UNITS
Class hours:3 lecture/3 lab
Prerequisite: AUTO 130 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
This theory and shop course is designed to teach basic automotive air conditioning; tools, skills and processes associated with the modern automobile; related information for developing knowledge and skills necessary to perform the most common and essential air conditioning service procedures. This course may be taken for a maximum of 8 units. (Formerly AUTO 18)
Transfer Credit:CSU

AUTO 190
AUTOMOTIVE MANAGEMENT 3 UNITS
Class hours:3 lecture
Prerequisite: AUTO 100 or equivalent with a grade of Credit or "C" or higher.
A course 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 estimating, efficient and effective use of time and space. (Formerly AUTO 19)
Transfer Credit:CSU

AUTO 192
INTRODUCTION TO ALTERNATIVE FUELS 3 UNITS
Class hours:3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces students to the role, function, and practical applications of Compressed Natural Gas (CNG) as an alternative fuel for the internal combustion engine. Propane, methanol, and hydrogen are also discussed. (Formerly AUTO 19.2)
Transfer Credit:CSU

AUTO 223
AUTOMOTIVE BODY ELECTRICAL 4 UNITS
Class hours:3 lecture/3 lab
Prerequisite: AUTO 130 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
This is a theory/practical course in the automotive body electrical system, covering all classes of electrical components and power accessories in the area of diagnosing and component repairs. (Formerly AUTO 23)
Transfer Credit:CSU

AUTO 224
HIGH PERFORMANCE ENGINES 5 UNITS
Class hours:4 lecture/4 lab
Prerequisite: AUTO 140 or AUTO 141 or equivalent with a grade of Credit or "C" or higher.
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 may be taken for a maximum of 10 units. (Formerly AUTO 24)
Transfer Credit:CSU

AUTO 225
ADVANCED AUTOMOTIVE MACHINE SHOP II 5 UNITS
Class hours:4 lecture/4 lab
Prerequisite: AUTO 150 or equivalent with a grade of Credit or "C" or higher.
This course is designed to familiarize the student with the more advanced machine operations used in automotive shop and mechanical repair industries. It will concentrate on advanced honing techniques, and welding and grinding crankshafts and camshafts. This course may be taken for a maximum of 10 units. (Formerly AUTO 25)
Transfer Credit:CSU

AUTO 226
AUTOMOTIVE AUTOMATIC TRANSMISSIONS 5 UNITS
Class hours:4 lecture/4 lab
Prerequisite: AUTO 100 or equivalent with a grade of Credit or "C" or higher.
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 for a maximum of 10 units. (Formerly AUTO 26)
Transfer Credit:CSU

AUTO 231
AUTOMOTIVE DIAGNOSTIC ENGINE PERFORMANCE 6 UNITS
Class hours:10 lecture/10 lab (9 weeks)
Prerequisite: AUTO 131 or equivalent with a grade of Credit or "C" or higher.
Corequisite: AUTO 73/74.
This is a theory/practical course in diagnosing automotive driveability problems. Areas such as ignition, carburetion, automotive computers, electronic engine controls and on-board diagnostic systems will be included. The course will be presented using a single manufacturer’s product line. (Formerly AUTO 43.1)
Transfer Credit:CSU

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AUTO 233
ELECTRONIC FUEL
MANAGEMENT SYSTEMS 5 UNITS
Class hours: 4 lecture/4 lab
Prerequisite: AUTO 130 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
This is a theory/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. This course may be taken for a maximum of 10 units. (Formerly AUTO 69.13/AUTO 80)
Transfer Credit: CSU

AUTO 243
DIAGNOSTIC ENGINE PERFORMANCE 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: AUTO 233 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
This is a theory/practical course in diagnosing automotive driveability problems. Areas such as ignition, carburetion, automotive computers, engine control, and on-board diagnostic systems will be included. This course may be taken for a maximum of 8 units. (Formerly AUTO 43)
Transfer Credit: CSU

AUTO 245L
AUTOMOTIVE SPECIALTY 2 UNITS
Class hours: 6 lab
Prerequisite: AUTO 225 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
This course is designed to further increase the student's knowledge of the area of his/her choice, working to trade standards. This course may be taken for a maximum of 6 units. (Formerly AUTO 45)
Transfer Credit: CSU

AUTO 280
AUTOMOTIVE GM/ CORPORATE TRENDS AND CAREERS 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is the introductory course in the General Motors Professional Automotive Sales and Service Certificate Program (GM PASS). It provides students interested in the GM PASS certificate program with a detailed overview of General Motors, the company history, each of its six divisions, and their respective products. General Motors market positioning, product philosophy, advertising themes, and other topics will be covered. (Formerly AUTO 69.13/AUTO 80)
Transfer Credit: CSU

BIOLOGY
(Science/Engineering/Math Division)

BIO 100
NATURAL HISTORY OF SO. CALIFORNIA 1 UNIT
(Also listed as GEOL 100)
Class hours: Total of 9 hours lecture with the minimum equivalent of 4 one-day field trips.
Prerequisite: None.
This is a field trip and seminar class in Biology and Geology of selected areas in So. California. Minerals, geology, landforms, plants, animals, ecology, human use, and recreation value will be studied. This course may be taken for a maximum of 2 units. (Formerly BIOL 16)
Transfer Credit: CSU

BIO 105
MAN AND ENVIRONMENT 3 UNITS
Class hours: 3 lecture
Recommendation: Satisfactory completion of the English Placement Process for ENGL 100 or equivalent with a grade of Credit 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. (Formerly BIOL 10)
Transfer Credit: CSU

BIO 108L
LIFE SCIENCE PREPARATIONS 1 UNIT
Class hours: 3 lab
Prerequisite: BIOL 120 or equivalent with a grade of Credit or "C" or higher.
This course is designed for pre-teaching, life science majors. The student will learn the use and care of laboratory apparatus through actual experience in the classroom. The student will assist the instructor in the laboratory by performing such jobs as helping to prepare demonstrations, designing displays, and aiding individuals in the class. This course may be taken for a maximum of 2 units. (Formerly BIOL 20.16)
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Biol 200 (Can Biol Seq A) Principles of Biology 5 Units
Class hours: 3 lecture/2 quiz/4 lab
Prerequisite: CHEM 111 or equivalent with a grade of Credit or “C” or higher or concurrent enrollment. BIOL 120 or ZOOL 120 or BOT 120 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.

The course provides a basic survey of major groups of organisms (Kingdoms Monera, Protista, Plants, and Animals) within a context of unifying themes of evolution and ecology. Emphasis will be on structure and function or organisms with consideration given to phylogeny, taxonomy, adaptations, and interactions among organisms and their environment. Animal behavior and select vertebrate organ systems will be included. This course is designed as one semester of a two part series (coordinating with BIOL 201) for biology/medical majors. (Formerly BIOL 5.1)
Transfer Credit: CSU; UC

Biol 201 (Can Biol Seq A) Principles of Biology 5 Units
Class hours: 3 lecture/2 quiz/4 lab
Prerequisite: CHEM 111 or equivalent with a grade of Credit or “C” or higher.
BIOL 120 or ZOOL 120 or BOT 120 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None. Recommendation: None.
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. (Formerly BIOL 5.2)
Transfer Credit: CSU; UC

Biol 202 Molecular Biology/Genetics 4 Units
Class hours: 4 lecture
Prerequisite: BIOL 201 and CHEM 211 or equivalent with grades of Credit or “C” or higher. CHEM 211 may be taken concurrently.
Corequisite: None.
Recommendation: None.

Biology 202 is an extension of the study of molecular biology, cell biology and genetics introduced in BIOL 201. This course examines the structure and function of nucleic acids and proteins in the living cell, as well as how these molecules are studied and manipulated in the laboratory. Topics include regulation of gene expression, recombinant DNA technology, chromosome mapping and viral and prokaryotic genetics.
Transfer Credit: CSU; UC

Biol 250L Special Topics in Biology 1 Unit
Class hours: 3 lab
Prerequisite: BIOL 120 or equivalent with a grade of Credit or “C” or higher.
This course is designed primarily for biological science majors. Individual research problems are explored using materials, equipment, and techniques not available to larger classes. This course may be taken for a maximum of 4 units. (Formerly BIOL 30.16)
Transfer Credit: CSU; UC

Botany (Science/ Engineering/ Math Division)

Bot 120 Introduction to Plant Science 4 Units
Class hours: 2 lecture/6 lab
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None. Recommendation: None.
This is a basic course in plant biology designed not only to introduce the student to plants, but also to cover in some depth many of the facets of botany. Included will be plant cell biology and chemistry, a survey of major plant groups and their life cycles and characteristics, plant ecology and evolution. The course will help prepare students for a life science major, but it can also be taken to fulfill a lab science requirement in general education. Four field trips to examine local plant communities are part of the class. Students will also conduct a research project, prepare a scientific paper, and make a poster presentation based on their project. (Formerly BOT 10)
Transfer Credit: CSU; UC

Business Accounting

Business Accounting

Business Accounting (Business Division)

Busa 1T (Not degree applicable) Accounting Microcomputer Tutorial 0 Units
Class hours: 2 lab
Prerequisite: None.

Corequisite: Enrollment in one or more Business Accounting (Busa) or Business Finance (Busf) course(s). Recommendation: None.
This course is designed to provide individual tutorial instruction for students studying computerized accounting to facilitate and reinforce their ability to complete assigned computerized projects. (Formerly BUSA 98)

Busa 2T (Not degree applicable) Accounting Tutorial 0 Units
Class hours: 2 lab
Prerequisite: None.
Corequisite: BUSA 100, BUSA 101, or BUSA 102.
Recommendation: None.
This course is designed to provide individualized tutorial instruction with assigned problems and practice sets for introductory accounting students. (Formerly BUSA 99)

Busa 51 Volunteer Income Tax Assistance 1.5 Units
Class hours: 2 lecture/3 lab (9 weeks)
Prerequisite: BUSA 51 or BUSA 250 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is designed to give students the knowledge and skills necessary to prepare simple federal income tax returns, on a volunteer basis, for low-income and disadvantaged members of the community. With the guidance of the instructor and Internal Revenue Service agents, students will gain experience in interviewing techniques and will apply skills learned in tax preparation while providing a much-needed service to their community.

Busa 60 QuickBooks Accounting 1.5 Units
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
Corequisite: BUSA 1.1T.
Recommendation: None.
This course introduces QuickBooks 6.0, a complete accounting software system for small businesses. (Formerly BUSA 35)

Busa 61 Turbo Tax Accounting 1.5 Units
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
Corequisite: BUSA 1.1T.
Recommendation: None.
This course introduces personal income tax preparation using Tax Return Preparation...
with Turbo Tax for Windows, a software package for preparing individual income tax returns. (Formerly BUSA 36)

**BUSA 100**  
INTRODUCTION TO ACCOUNTING  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This accounting course introduces the theory and practice of double entry accounting. Emphasis will be placed upon understanding the basic financial records and forms and applying elementary accounting procedures. (Formerly BUSA 10)  
Transfer Credit: CSU

**BUSA 101**  
INTRODUCTION TO ACCOUNTING I  
4 UNITS  
Class hours: 3 lecture/2 lab  
Prerequisite: BUSA 100 or equivalent with a grade of Credit or "C" or higher.  
This course covers the basic concepts used by businesses for financial accounting. The course includes a study of: the accounting concepts and techniques essential to the administration of a business enterprise; measuring and communicating economic information; analyzing and recording financial transactions; and the preparation of financial statements for sole proprietorships, partnerships, and corporations. (Formerly BUSA 11)  
Transfer Credit: CSU, UC

**BUSA 102**  
INTRODUCTION TO ACCOUNTING II  
4 UNITS  
Class hours: 3 lecture/2 lab  
Prerequisite: BUSA 101 or equivalent with a grade of Credit or "C" or higher.  
This course covers the basic concepts used by businesses for managerial accounting. The course includes a study of: managerial accounting concepts and systems; job order cost systems; analyses for managerial decision making; planning, and controlling techniques and principles. (Formerly BUSA 12)  
Transfer Credit: CSU, UC

**BUSA 130**  
PAYROLL TAX ACCOUNTING  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: BUSA 100 or BUSA 101 or equivalent with a grade of Credit or "C" or higher.  
This course will cover fundamental principles of payroll tax laws as defined by Federal, State, and local government. It will also include discussion of Social Security, Federal and State income taxes, Federal and State Unemployment Insurance, Workmen's Compensation Insurance, and journal entries to record payroll information. It will include sales tax requirements in recordkeeping 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 30)  
Transfer Credit: CSU

This course is designed to teach students the application of accounting functions using the IBM compatible microcomputer and spreadsheet accounting software. The accounting concepts will include corporation financial statements, financial ratios, manufacturing accounts, plant assets, accounts and notes receivable, inventory valuation, notes payable, budgeting, and forecasting utilizing generally accepted accounting principles. (Formerly BUSA 34)  
Transfer Credit: CSU

**BUSA 131**  
COMPUTERIZED ACCOUNTING-IBM  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: BUSA 100 or BUSA 101 or equivalent with a grade of Credit or "C" or higher.  
Corequisite: BUSA 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 31)  
Transfer Credit: CSU

**BUSA 133**  
SPREADSHEET ACCOUNTING I  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: BUSA 100 or equivalent with a grade of Credit or "C" or higher.  
Corequisite: BUSA 1T.  
This course is designed to teach students the application of accounting functions using the IBM compatible microcomputer and spreadsheet software. The accounting functions will include the development of financial statements, worksheets, special journals, payroll, bank reconciliations, and personal budgeting. (Formerly BUSA 33)  
Transfer Credit: CSU

**BUSA 134**  
SPREADSHEET ACCOUNTING II  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: BUSA 101 and BUSA 133 or equivalent with grades of Credit or "C" or higher.  
Corequisite: BUSA 1T.
Occupational Work Experience require 120 non-paid hours of work or 150 paid hours of work per semester.

Recommendation: None.

Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken for a maximum of 6 units. (Formerly BUSA 72)

Transfer Credit: CSU

**BUSA 173/174**

**BUSINESS ACCOUNTING OCCUPATIONAL WORK EXPERIENCE**

3-4 UNITS

Class hours: 1 hour/week coordination class.

Corequisite: Enrollment in 7 or more units, including Occupational Work Experience, in a declared business major. Each 75 hours of paid work equals one semester of credit or 60 hours of non-paid work equals one semester of credit at the training site.

Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers.

First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site.

Second, third, and fourth semester students must secure departmental approval before enrolling. Students will meet weekly until their participatory assignments and semester work projects have been approved. These courses may be taken for a maximum of 15-16 units. (Formerly BUSA 73/74)

Transfer Credit: CSU

**BUSA 201**

**INTERMEDIATE ACCOUNTING I**

4 UNITS

Class hours: 3 lecture/2 lab

Prerequisite: BUSA 102 or equivalent with a grade of Credit or "C" or higher.

This course covers the preparation of accounting statements and the study of accounting theory, utilizing the corporate form of business organizations. The emphasis of the course is on the sequential study of the various classifications and items of the balance sheet, including current and non-current assets. (Formerly BUSA 21)

Transfer Credit: CSU

**BUSA 202**

**INTERMEDIATE ACCOUNTING II**

4 UNITS

Class hours: 3 lecture/2 lab

Prerequisite: BUSA 201 or equivalent with a grade of Credit or "C" or higher.

This course is a continuation of BUSA 201. It is an in-depth study of the balance sheet items relating to non-current assets, current liabilities, long-term liabilities, paid-in capital and retained earnings. The course includes techniques of comparative analysis, interpretation and projection of financial statements, fund-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 22)

Transfer Credit: CSU

**BUSA 230**

**ADVANCED PAYROLL ACCOUNTING**

3 UNITS

Class hours: 3 lecture

Prerequisite: BUSA 130 or equivalent with a grade of Credit or "C" or higher.

Corequisite: BUSA 1T.

Recommendation: None.

This course is designed to build on the basic payroll knowledge and skills gained in the Payroll Tax Accounting course. It covers advanced topics in payroll systems analysis, payroll administration, accounting for cafeteria plans, flexible spending accounts, tax deferred savings accounts and retirement plans. Taxation of fringe benefits, health, accident and disability benefits, and expatriot payments are explored. Methods of developing compensation plans are also discussed. This course is applicable to those students who plan to take the Certified Payroll Professional examination sponsored by the American Payroll Association.

Transfer Credit: CSU

**BUSA 231**

**CURRENT TOPICS IN PAYROLL ACCOUNTING**

1.5 UNITS

Class hours: 3 lecture (9 Weeks)

Prerequisite: None.

Corequisite: None.

Recommendation: None.

This course is designed to give payroll accounting students exposure to experts in federal and state payroll tax law, Workers' Compensation Insurance, union payroll, labor and fair employment law, sales taxes and payroll administration. The course is structured as a current topics seminar with guest speakers from the legal field, the Internal Revenue Service, the Franchise Tax Board, the State Board of Equalization, the Employment Development Department, The California Society of Certified Public Accountants, and Certified Payroll Professionals. This course may be taken for a maximum of 3 units.

Transfer Credit: CSU

**BUSA 240**

**COST ACCOUNTING**

4 UNITS

Class hours: 3 lecture/2 lab

Prerequisite: BUSA 100 or BUSA 101 or equivalent with a grade of Credit or "C" or higher.

This course covers the various methods of cost accounting in use by manufacturing concerns. The details of accounting for materials, labor, and manufacturing overhead costs and expenses are presented. A study is made of the use of job order cost systems, process cost systems, and standard cost systems. The related areas of budgeting, break-even, and profit-volume analysis by management are included. A practice set is used. (Formerly BUSA 40)

Transfer Credit: CSU

**BUSA 241**

**MANAGERIAL ACCOUNTING**

4 UNITS

Class hours: 3 lecture/2 lab

Prerequisite: BUSA 101 and BUSA 102 or equivalent with grades of Credit or "C" or higher.
This course introduces the managerial accounting concepts and principles that will enable the student to understand managerial accounting as it is applied in serving management needs. Topics include: fundamentals of managerial accounting; managerial accounting concepts and systems; managerial accounting planning and control; accounting for decentralized operations; analyses for decision making; modern uses of managerial accounting. (Formerly BUSA 60) Transfer Credit:CSU

**BUSA 250**

**INCOME TAX ACCOUNTING 3 UNITS**

Class hours: 3 lecture
Prerequisite: BUSA 100 or BUSA 101 or equivalent with a grade of Credit or “C” or higher.

This course is a practical study of the current Federal revenue acts as they relate to business and individual income tax procedures. It includes income inclusions and exclusions, exemptions, capital gains and losses, and business and individual deductions. This course reflects the tax laws of the Tax Reform Act of 1986, Public Law 99-514 of October 22, 1986. (Formerly BUSA 50.1) Transfer Credit:CSU

**BUSA 280**

**ADVANCED ACCOUNTING 3 UNITS**

Class hours: 3 lecture
Prerequisite: BUSA 202 or equivalent with a grade of Credit or “C” or higher.
This class covers partnership and joint venture accounting, installment sales, consolidated financial statements, bankruptcy, accounting for trusts and estates, and government and non-profit accounting. (Formerly BUSA 80) Transfer Credit:CSU

**BUSA 251**

**ADVANCED INCOME TAX ACCOUNTING 3 UNITS**

Class hours: 3 lecture
Prerequisite: BUSA 250 or equivalent with a grade of Credit or “C” or higher.

This course is a practical study of the current Federal revenue acts as they relate to business and individual income tax procedures. It includes income inclusions and exclusions, exemptions, capital gains and losses, and business and individual deductions. This course reflects the tax laws of the Tax Reform Act of 1986, Public Law 99-514 of October 22, 1986. (Formerly BUSA 51.1) Transfer Credit:CSU

**BA 50**

**BUSINESS MATH 3 UNITS**

Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
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. (Formerly BA 15)

**BA 51**

**LEGAL ASPECTS OF MANAGEMENT 3 UNITS**

Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
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. (Formerly BA 14)

**BA 52**

**FUNDAMENTALS OF IMPORTING AND EXPORTING 3 UNITS**

Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a course in 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. (Formerly BA 6) Transfer Credit:CSU

**BA 54**

**RETAIL DISPLAY 3 UNITS**

Class hours: 3 lecture
Prerequisite: None.
This course covers principles and methods of arranging windows, wall cases, floor cases, and open displays in a pleasing merchandising manner. It also covers the principles of design, the use of color, fashion coordination, and seasonal promotion as they relate to objectives of a retail establishment. (Formerly BA 61)

**BA 55**

**INTRODUCTION TO LOGISTICS 3 UNITS**

Class hours: 3 lecture
Prerequisite: None.
This course introduces the student to the principles and concepts of Logistic functions. Class lectures will cover the total product flow from the inbound raw materials to the outbound finished goods. Logistics activities to be discussed will be warehousing, transportation, inventory management and materials handling. (Formerly BA 63)

**BA 56**

**MOTIVATION IN MANAGEMENT 3 UNITS**

Class hours: 3 lecture
Prerequisite: None.
This course is designed to give the student a practical working knowledge of how to meet and overcome many of the typical problems encountered in management. (Formerly BA 84)

**BA 57**

**INVENTORY MANAGEMENT 3 UNITS**

Class hours: 3 lecture
Prerequisite: None.
This course introduces the student to the principles and concepts of Inventory Management. Control of inventory stresses the importance of inventory as well as Inventory Management’s relationship with other business functions. This course is designed to assist the student to pass the APICS (American Production and Inventory Control Society) certification examination. (Formerly BA 90)

**BA 58**

**JUST-IN-TIME INVENTORY MANAGEMENT 3 UNITS**

Class hours: 3 lecture
Prerequisite: None.
This course trains the student in the competitive process of Just-In-Time Inventory Management. New design criteria and facility layout are necessitated by Just-In-
Time managed companies. This course prepares the student for the national certification examination conducted by APICS (American Production and Inventory Control Society). (Formerly BA 93)

**BA 59**  
**MATERIAL REQUIREMENTS PLANNING (MRP)**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course is designed for comprehensive treatment of time-phased material requirements planning (MRP) in conjunction with computerized system techniques. Fundamental concepts and principles will be discussed as system elements and implementation alternatives. System inputs as well as outputs will be analyzed in light of inventory practices and control procedures. This course prepares the student for the national certification examination conducted by APICS (American Production and Inventory Control Society). (Formerly BA 94)

**BA 60**  
**MASTER SCHEDULING**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course trains the student in the various techniques used by marketing and manufacturing to anticipate and control customers' demand against the company's build plan. This course prepares the student for the national certification examination conducted by APICS (American Production and Inventory Control Society). (Formerly BA 95)

**BA 62**  
**BUSINESS ON THE INTERNET**  
1.5 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
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: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course explores the factors that determine the possibility of starting a home-based business. The process of starting and operating a home-based business is included in this course.

**BA 100**  
**FUNDAMENTALS OF BUSINESS**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course, designed for the beginning business student, will survey business principles, problems, practices, and procedures as they pertain to the societal challenges facing business and the economic challenges facing America. Business topics will be discussed, such as: the nature of business, ownership, recruitment and training of personnel, labor-management relations, production and distribution of goods, competition, profits, transportation, finance, managerial controls, government, and business relations. (Formerly BA 1)  
Transfer Credit: CSU; UC

**BA 101**  
**INTERNATIONAL BUSINESS**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course is a survey of the factors, problems, and techniques involved in conducting business in the market places of the world and includes an overview of economic, political, geographic, and social factors that affect business transactions abroad. (Formerly BA 2)  
Transfer Credit: CSU

**BA 102**  
**INTERNATIONAL BUSINESS LAW**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
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. (Formerly BA 3)  
Transfer Credit: CSU

**BA 104**  
**CULTURAL BRIDGES FOR BUSINESS**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course introduces the students to various human characteristics and differences which exist in world-wide business environments. Communication styles, business ethics, manners, 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. (Formerly BA 4)  
Transfer Credit: CSU

**BA 105**  
**PERSONNEL-POLICY AND PROCEDURES**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course is designed to provide the student with an in-depth probe of personnel from an administrative role. It includes the implementation of compliance with governmental regulations and laws. (Formerly BA 5)  
Transfer Credit: CSU

**BA 106**  
**HUMAN RESOURCE MANAGEMENT**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course is designed to acquaint the student with the principles and methods related to the effective utilization of personnel in the business organization. It will develop relations involved in recruitment, selection, placement, training, and supervision of employees. It will also include an introduction to the organized labor movement and current labor relations conditions. (Formerly BA 42)  
Transfer Credit: CSU

**BA 107**  
**HUMAN RELATIONS IN BUSINESS**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course is designed to aid future employees and employers to understand and utilize human relations concepts as they apply to the business environment. It will cover such areas as morale, personal efficiency, leadership, personality, motivation, and communication. (Formerly BA 31)  
Transfer Credit: CSU

**BA 108**  
**LABOR MANAGEMENT RELATIONS**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This is an introductory course in labor-management relations for supervisors and union shop stewards. It focuses on collective bargaining and the functions of management.
unions and labor agreements. An indepth study will be made of the Labor Management Relations Act as amended, the National Labor Relations Board, and the Landrum-Griffin Act. Special attention is given to grievance procedures and arbitration cases. Negotiations of a collective bargaining agreement will be simulated. (Formerly BA 32) Transfer Credit:CSU

BA 110

ADVERTISING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course covers the study of magazine, newspaper, radio, billboard, direct mail, and other special forms of publicity. Problems of space, type, copy, and the preparation of the complete layout are discussed. The principles of effective techniques with ample practice in the preparation of different types of advertisements will be covered. (Formerly BA 62) Transfer Credit:CSU

BA 111

BUSINESS LAW 3 UNITS
(Class BUS 8)
Class hours: 3 lecture
Prerequisite: None.
This is a survey 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 BA 11) Transfer Credit:CSU;UC

BA 112

BUSINESS LAW 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This is a course designed to acquaint the student with the legal aspects of the business world. It will cover bailments, personal property, real property, agency, partnerships, corporations, wills, trusts, secured interests, and international law. (Formerly BA 12) Transfer Credit:CSU;UC

BA 113

LEGAL ENVIRONMENT OF BUSINESS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This is a course that provides a meaningful portrayal of the operation and interaction of public and private law in the political and socio-economic environment. This is achieved by the study of the state and federal legal system and the laws that regulate the business organizations. (Formerly BA 13) Transfer Credit:CSU;UC

BA 114

MARKETING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course covers problems and organizations of systems of distributing goods and services in our business world. It will include promotion through retail and wholesale parallels, consumer buyer habits, pricing, budgeting, transportation, warehousing, sources and uses of marketing information, and marketing of agricultural products. (Formerly BA 55) Transfer Credit:CSU

BA 115

MANAGEMENT— BUSINESS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course will cover the principles and techniques in the management of business. It includes organizing, planning, controlling, directing, and the application of management principles to business organizations. (Formerly BA 40) Transfer Credit:CSU

BA 117

INTRODUCTION TO SUPERVISION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
An introductory course focusing on the leadership skills and responsibilities required of supervisors in industry, business, and government agencies. Topics to be explored will include effective communication practices, training and evaluation of employees, management systems organization, and delegation of responsibilities. Class demonstration of leadership skills. Designed for in-service supervisors and pre-supervisor education. (Formerly BA 30) Transfer Credit:CSU

BA 118

MANAGEMENT— RETAILING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed to meet the needs of retail store managers and help prepare students for positions in retail store management. Topics covered: organizational structure, merchandise planning and control, sales promotion, pricing, and expense management. (Formerly BA 43) Transfer Credit:CSU

BA 119

MANAGEMENT— SUPERMARKET 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed to meet the needs of students in supermarket management by acquainting the student with the management functions of planning, organizing, staffing, directing, controlling, innovating, and representing as they apply to the supermarket. (Formerly BA 82) Transfer Credit:CSU

BA 120

MANAGEMENT— ACCOUNTING AND INTERNAL CONTROL 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
The accounting cycle will be introduced with emphasis on understanding financial records. Instruction will be given on the internal control of the industry being studied as well as an introduction to the analysis of the financial statements. (Formerly BA 81) Transfer Credit:CSU

BA 121

SALES 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course covers opportunities in selling, development of desirable personality traits, methods of approach to prospective customers, the art of demonstrating goods, how to meet objections, and how to close the sale. (Formerly BA 50) Transfer Credit:CSU

BA 123

FUNDAMENTALS OF RETAILING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed to help the student develop an understanding of the problems, policies, and methods of merchandising as carried on in retail stores. Topics covered: careers in retailing, store layout, pricing goods, buying and receiving of merchandise and customer services. (Formerly BA 66) Transfer Credit:CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
BA 149  
**CURRENT MANAGEMENT THEORY**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course is an introduction to TQM (Total Quality Management) and other current management theories. The ideas of prominent management consultants will be reviewed, discussed, and analyzed. These theories will be compared as to how they can be applied. (Formerly BA 49)  
Transfer Credit: CSU

BA 153  
**SMALL BUSINESS MANAGEMENT**  
3 UNITS  
Class hours: 3 lecture + 1 hr. lab arr.  
Prerequisite: None.  
This course is designed to acquaint the student with the knowledge of principles, procedures, and opportunities in small business management. It covers such topics as entrepreneurial opportunities, developing a business plan, marketing, operations, and financial management. It briefly covers the practical aspects of record keeping, planning, and control. (Formerly BA 41, BA 53)

BA 161  
**CONSUMER LAW**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course is an introduction to the workings of the law to help the consumer better understand legal fundamentals and procedures. This course covers the legal profession and careers; the court system in the United States, contracts, property rights, negligence, wills, business organizations, marriage and divorce, real estate, bankruptcy, and consumer protection. (Formerly BA 16, BA 61)

BA 171  
**BUSINESS ADMINISTRATION WORK EXPERIENCE**  
1 UNIT  
Class hours: 1 lecture  
Prerequisite: None.  
Corequisite: Enrollment in 7 or more units, including Business Administration Occupational Work Experience, in a declared business major. One unit of Business Administration Occupational Work Experience requires 60 non-paid hours of work or 75 paid hours of work per semester.  
Recommendation: None.  
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken for a maximum of 3 units. (Formerly BA 71)  
Transfer Credit: CSU

BA 173/174  
**BUSINESS ADMINISTRATION OCCUPATIONAL WORK EXPERIENCE**  
3-4 UNITS  
Class hours: 1 hour/week coordination class.  
Corequisite: Enrollment in 7 or more units, including Business Administration Occupational Work Experience, in a declared business major. Three units of Business Administration Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester. Four units of Business Administration Occupational Work Experience require 240 non-paid hours of work or 300 paid hours of work per semester.  
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Second, third, and fourth semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. These courses may be taken for a maximum of 15-16 units. (Formerly BA 73/74)  
Transfer Credit: CSU

BA 200  
**PRINCIPLES OF BANKING**  
3 UNITS  
Class hours: 3 lecture.  
Prerequisite: None.  
This is an introductory course in commercial banking. It will deal with issues, subjects, and situations bankers encounter today. The topics covered will include: negotiable instruments, deposits, payments, personnel, data handling, loan functions, bank services, and management of assets. (Formerly BA 20)  
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
BA 201
MONEY AND BANKING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This is an introductory course whose principal objective is to explain how our modern monetary institutions can best meet the needs of society. Topics covered are monetary theory, money creation, flow, controls, national policy, and international factors. The questions of how fiscal and monetary policies may help us solve our problems will be thoroughly examined. (Formerly BA 21)
Transfer Credit: CSU

BA 203
MANAGEMENT—
DEPARTMENT OPERATIONS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed to provide the student with an understanding and appreciation of staff-supported activities in an organization. The interaction of the various departments and the work flow are analyzed for the purpose of developing a cooperative attitude among personnel of the various departments. (Formerly BA 83)
Transfer Credit: CSU

BA 206
PRODUCTION ACTIVITY CONTROL 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course trains the student in the commonly known and accepted manufacturing principles and practices of production controls. Production control objectives are developed for controlling input, output, measurement, and corrective actions. Scheduling techniques, records, routings, capacity, and load criteria as well as production releases and shortages are taught. This course prepares the student to pass the national certification examination conducted by APICS (American Production and Inventory Control Society). (Formerly BA 92)
Transfer Credit: CSU

BA 207
CAPACITY MANAGEMENT 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course prepares the student to establish the interrelationship of capacity management to the total production and inventory management systems of a company. Capacity management also addresses the problem of planning and controlling various capacities of the industrial firm. Capacity management is the process of determining the necessary resources (land, facilities, money, equipment, work force) to meet the production objectives of the firm. This class prepares the student to pass the national certification examination conducted by APICS (American Production and Inventory Control Society). (Formerly BA 92)
Transfer Credit: CSU

BUSINESS COMMUNICATION
(Business Division)

BCOM 1T (Not degree applicable)
INDIVIDUALIZED BUSINESS COMMUNICATIONS SKILLS 0 UNITS
Class hours: 3 lab, (17 weeks)
open entry/open exit
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to improve the written and/or verbal communication skills of students independent of a lecture class. Work may be assigned in any or all of the following areas: communication skills, listening skills, problem-solving skills, employment techniques, proofreading techniques, grammar, vocabulary, punctuation, and techniques and procedures for reading and writing business correspondence. (Formerly BCOM 40)

BCOM 45 (Not degree applicable)
EFFECTIVE COMMUNICATION FOR MANAGERS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course will help students develop written reports and other types of communication such as letters and surveys unique in the management field. They will learn the mechanics such as word usage and spelling related to a particular industry. Students will develop telephone and dictation techniques. (Formerly BCOM 49)

BCOM 46 (Not degree applicable)
BUSINESS COMMUNICATIONS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course reviews the fundamentals of grammar, sentence structure, punctuation, capitalization, spelling, and business vocabulary building. Completion of the course fulfills 54 hours of the English requirement for the Court Reporting Certification.

BCOM 50
INTERNET AS A BUSINESS COMMUNICATION TOOL 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BCOT 62 and concurrent enrollment in BCOT 3T
This course is designed to teach students the technological skills necessary to communicate in today’s e-commerce computer-oriented business environment. The course will cover electronic mail (e-mail), desktop publishing for electronic dissemination, Web page design, electronic presentations, and Outlook. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an online learning environment.

BCOM 51
BUSINESS ORAL COMMUNICATION 1.5 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course focuses on the importance of good oral communication skills for success in business. It provides practice for developing speaking and listening skills within the business environment for careers in selling, marketing, and management.

BCOM 147
BUSINESS COMMUNICATIONS 3 UNITS
Class hours: 3 lecture
Prerequisite: BCOM 46 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: BCOM 151 and ENGL 100 or equivalent with grades of Credit or “C” or higher.
This course integrates instruction and practice in business writing. The emphasis is on modern structure, style, vocabulary, grammar, and logical organizational patterns. The course content emphasizes memos and letters, reports, career communications, oral communication, global and multicultural issues, legal and ethical situations, and communication technology. (Formerly BCOM 47)
Transfer Credit: CSU

BCOM 148
EFFECTIVE BUSINESS PRESENTATIONS 3 UNITS
Class hours: 3 lecture
Prerequisite: BCOM 46 or ENGL 52 or equivalent with a grade of Credit or “C” or higher or

All courses on this page are Title V Associate Degree applicable credit courses unless otherwise noted.

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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. (Formerly BCOM 48) Transfer Credit:CSU

BCOM 150
INTERNATIONAL BUSINESS COMMUNICATION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: BCOM 147 or ENGL 100 or equivalent with a grade of Credit or “C” or higher.
This course covers issues and skills that are crucial to effective intercultural communication in business. The most significant issues pertaining to cross-cultural interaction are examined. Practical guidelines and information on how to conduct negotiations across countries, as well as general 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. (Formerly BCOM 50) Transfer Credit:CSU

BCOM 152
JOB SEARCH IN THE BUSINESS FIELD 1.5 UNITS
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: Completion of or near completion of any certificate or AA degree in the Business Division.
This course prepares business students for the job search process. It emphasizes job search tools, techniques, and procedures for researching the labor market; health and image professional development; writing strategies for resumes, cover letters, and thank-you letters; and understanding human relations in job adjustment. This course may be taken for a maximum of 3 units. (Formerly BCOM 52) Transfer Credit:CSU

BUSINESS COMPUTERIZED OFFICE TECHNOLOGIES
(Business Division)

BCOM 1T (Not degree applicable)
INDIVIDUALIZED OFFICE SKILLS 0 UNIT
Class hours: 3 lab, (17 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to improve the office skills of students independent of a lecture class. Work may be assigned in any or all of the following areas: word processing software, spreadsheet software, database software, graphics software, filing procedures, telephone communications, mail procedures, communication skills, listening skills, problem-solving skills, and customer service. (Formerly BASS 30/BASS 1T)

BCOM 3T (Not degree applicable)
WORD PROCESSING/TYPING/KEYBOARDING TUTORIAL 0 UNIT
Class hours: 1 lab
Open entry/open exit
Prerequisite: None.
Corequisite: None.
Recommendation: Enrollment in any BCOT word processing or typing/keyboarding course. This course is designed to facilitate and reinforce the learning of word processing functions, skills, and concepts through individualized and mediated instruction. It will also facilitate and reinforce the learning of typing skills and formatting theory through

individualized instruction. This course is open to any student enrolled in any BCOT word processing or typing/keyboarding course. (Formerly BASS 3/BASS 3T)

BCOM 50
ADVANCED WORDPERFECT FOR WINDOWS 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: BCOM 108 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.
This course offers students opportunities to build advanced skills, speed, and problem-solving abilities using WordPerfect for Windows software. (Formerly BASS 9/BASS 50)

BCOM 51
ADVANCED MICROSOFT WORD FOR WINDOWS 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: BCOT 112 or equivalent with a grade of Credit or “C” or higher.
Recommendation: Concurrent enrollment in BCOT 3T.
This course offers students opportunities to build advanced skills, speed, and problem-solving abilities using Microsoft Word for Windows software. (Formerly BASS 13/BASS 51)

BCOM 52
DATA ENTRY 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
This course is designed to enable students to develop skill as data entry operators. Students will utilize a full screen data entry terminal. Data will be recorded on diskettes. Students also will be introduced to the microcomputer. (Formerly BCIS 6/BCIS 51)

BCOM 60
TELEPHONE TECHNIQUES/CUSTOMER SERVICE 1 UNIT
Class hours: 2 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course teaches the importance of effective telephone techniques in the business office and the correct manner of identifying customer wants and needs. (Formerly BASS 60)
Announcement of Courses

BCOT 61
TYING/KEYBOARDING REVIEW
2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: Computer keyboard skills and ability to type 25 wpm.
Recommendation: Concurrent enrollment in BCOT 3T.
This course provides a review for those students who have had previous typing experience and wish to improve their typing and formatting skills. This course can be taken in either a traditional or an on-line learning environment. (Formerly BASS 32/BASS 61)

BCOT 62
COMPUTER KEYBOARDING
1 UNIT
Class hours: 2 lecture/1 lab (9 weeks)
Prerequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.
This course is designed for data processing and accounting students who do not know how to touch type. Executives/managers/operators who use computer work stations; people who seek data entry positions; and users of personal home computers. Touch typewriting of alphabetic, numeric, and symbol keys on computers is emphasized. This course can be taken in either a traditional or an on-line learning environment. (Formerly BASS 2/BASS 62)

BCOT 70
MEDICAL MACHINE TRANSCRIPTION
4 UNITS
Class hours: 4 lecture/2 lab
Prerequisite: BCOT 61 or BCOT 131, BCOT 162, BCOM 46, and MA 161 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.
This course is designed to develop skills in critical thinking, decision making, and creativity in planning, heads, business cards, personal documents, flyers, brochures, promotional documents, charts, transparencies, presentation materials, and concurrent enrollment in BCOT 3T.

BCOT 71
COMPUTERS IN THE MEDICAL OFFICE
3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
This course provides a review for those students who have had previous typing experience and wish to improve their typing and formatting skills. This course can be taken in either a traditional or an on-line learning environment. (Formerly BASS 32/BASS 61)

BCOT 80
PROCESSING LAW OFFICE DOCUMENTS
2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: BCOT 108 or BL 57 or equivalent with a grade of Credit or “C” or higher.
Recommendation: Concurrent enrollment in BCOT 3T.
This course introduces the student to the correct style for legal documents set by common usage or by court procedure. The specific formats required by law office documents will be emphasized. (Formerly BASS 17/BASS 80)

BCOT 81
LEGAL OFFICE PROCEDURES
4 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: BCOT 131 or equivalent with a grade of Credit or “C” or higher. Ability to type 30 wpm.
Recommendation: Concurrent enrollment in BCOT 3T.
This course is designed to prepare students for employment as legal secretaries. It emphasizes procedures, preparations of calendars, 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. (Formerly BASS 50/BASS 81)

BCOT 82
SPANISH LEGAL OFFICE TERMINOLOGY/VOCABULARY
1.5 UNITS
Class hours: 3 lecture (9 weeks)
Prerequisite: SPAN 112 or SPAN 201 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is designed to be used by students already familiar with word processing. Applications of key concepts are designed to develop skills in critical thinking, decision making, and creativity in planning, designing, or evaluating documents—letterheads, business cards, personal documents, flyers, brochures, promotional documents, charts, transparencies, presentation materials, and concurrent enrollment in BCOT 3T.

BCOT 83
LEGAL OFFICE TERMINOLOGY/ MACHINE TRANSCRIPTION
4.5 UNITS
Class hours: 4 lecture/2 lab
Prerequisite: BCOT 61 or BCOT 131, BCOT 162, and BCOM 46 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T and the ability to type 30 wpm.
This course is designed to teach the student legal terminology in order to be able to transcribe and key legal documents. The student will also learn the skills and knowledge necessary for the production of high-quality legal documents through the total transcription concept and for the development of proper machine dictation skills/procedures. The emphasis is on understanding, defining, and using over 900 terms in the legal context; skilful keyboarding; and accurate proof-reading to produce quality, finished legal documents on electronic equipment/microcomputers. (Formerly BASS 64/BASS 83)

BCOT 108
WORDPERFECT FOR WINDOWS
3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Ability to type 30 wpm and concurrent enrollment in BCOT 3T.
This course offers students opportunities to learn WordPerfect for Windows, which is an advanced word processing program. This course will further prepare students for a successful business career. (Formerly BASS 8/BASS 108).
Transfer Credit:CSU

BCOT 110
DESKTOP PUBLISHING—WORDPERFECT FOR WINDOWS
1.5 UNITS
Class hours: 3 lecture/2 lab (9 weeks)
Prerequisite: BCOT 108 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: BCOT 50 or equivalent with a grade of Credit or “C” or higher and concurrent enrollment in BCOT 3T.
This course is designed to be used by students already familiar with word processing. Applications of key concepts are designed to develop skills in critical thinking, decision making, and creativity in planning, designing, or evaluating documents—letterheads, business cards, personal documents, flyers, brochures, promotional documents, charts, transparencies, presentation materials,

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Announcement of Courses

BCOT 116
DESKTOP PUBLISHING—WORD FOR WINDOWS 1.5 UNITS
Class hours:3 lecture/2 lab (9 weeks)
Prerequisite: BCOT 112 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.
This course introduces the student to word processing functions on the IBM compatible personal computers using Microsoft Word for Windows software. Topics include basic Microsoft Word for Windows functions: entering/exitng, creating and saving a document, cursor movements, inserting and deleting text, margins, tabs, formatting, search, replace, printing, headers and footers, footnotes and hyphenation, spell check, thesaurus, macros, merge, math, outline, and desktop publishing. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an on-line learning environment. (Formerly BASS 31/BASS 131)
Transfer Credit: CSU

BCOT 113
INTERMEDIATE TYPING/KEYBOARDING 3.5 UNITS
Class hours:3 lecture/2 lab
Prerequisite: Ability to type 30 wpm or BCOT 61 or equivalent with a grade of Credit or "C" or higher.
Recommendation: Concurrent enrollment in BCOT 3T.
In this course the student develops speed and control in typing as well as attains a working knowledge of business papers, facility in tabulation, and skill in production typing. This course can be taken in either a traditional or an on-line learning environment. (Formerly BASS 33/BASS 133)
Transfer Credit: CSU

BCOT 112
MICROSOFT WORD FOR WINDOWS 3.5 UNITS
Class hours:3 lecture/2 lab
Prerequisite: None.
Recommendation: Ability to type 30 wpm and 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 basic Microsoft Word for Windows functions: entering/exiting, creating and saving a document, cursor movements, inserting and deleting text, margins, tabs, formatting, search, replace, printing, headers and footers, footnotes and hyphenation, spell check, thesaurus, macros, merge, math, outline, and desktop publishing. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an on-line learning environment. (Formerly BASS 14/BASS 114)
Transfer Credit: CSU

BCOT 114
INTRODUCTION TO MICROSOFT OFFICE 3.5 UNITS
Class hours:3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Ability to type 30 wpm and concurrent enrollment in BCOT 3T.
This course is designed to teach students business applications software and office skills using Windows compatible computers and Microsoft Office (Word, Excel, Access, and PowerPoint) to integrate the multifaceted tasks within the office environment. Concepts and skills include creating, editing, and printing letters, memos, reports, presentations, graphics, overheads, business figure analysis, miscellaneous office documents, and maintenance/modification of databases. This course can be taken in either a traditional or an on-line learning environment. (Formerly BASS 14/BASS 114)
Transfer Credit: CSU

BCOT 120
WORD PROCESSING OFFICE SIMULATION 3.5 UNITS
Class hours:3 lecture/2 lab
Prerequisite: BCOT 108 or BCOT 112 or equivalent with a grade of Credit or "C" or higher.
Recommendation: Concurrent enrollment in BCOT 3T.
This course reinforces previously learned word processing keyboarding and language arts skills. It introduces students to typical word processing procedures and activities in a realistic setting. It provides meaningful application materials for students who can operate word processing equipment. (Formerly BASS 20/BASS 120)
Transfer Credit: CSU

BCOT 131
BEGINNING TYPING/KEYBOARDING 3.5 UNITS
Class hours:3 lecture/2 lab
Prerequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.
This is a basic course in typing designed to teach control of the keyboard by touch. The student will learn basic computer parts and terminology. This course can be taken in either a traditional or an on-line learning environment. (Formerly BASS 31/BASS 131)
Transfer Credit: CSU

BCOT 133
ADVANCED TYPING/KEYBOARDING 3.5 UNITS
Class hours:3 lecture/2 lab
Prerequisite: Ability to type 40 wpm or BCOT 133 or equivalent with a grade of Credit or "C" or higher.
Recommendation: Concurrent enrollment in BCOT 3T.
This advanced keyboarding class is taught on electronic typewriters. The emphasis is on advanced office skills which include editing, abstracting information, decision-making, prioritizing, planning work flow, following directions, and working under pressure and with interruptions. (Formerly BASS 34/BASS 134)
Transfer Credit: CSU

BCOT 135
TYPOWRITING SPEED/CONTROL BUILDING 1 UNIT
Class hours:2 lecture/1 lab (9 weeks)
Prerequisite: Knowledge of keyboard and key strokes.
Recommendation: 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 units. (Formerly BASS 35/BASS 135)
Transfer Credit: CSU

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Announcement of Courses

BCOT 155
ADMINISTRATIVE SECRETARIAL PROCEDURES 4 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: BCOT 131 or equivalent with a grade of Credit or "C" or higher. Ability to type 30 wpm.
Recommendation: 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. (Formerly BASS 55/BASS 155)
Transfer Credit: CSU

BCOT 161
PRINCIPLES OF FILING 1 UNIT
Class hours: 2 lecture/1 lab (9 weeks)
Prerequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.
This is a computerized filing course that covers the principles of information processing, storage, and retrieval. Instruction is given in the rules of indexing and alphabetizing. A study will be made of geographic, numeric, subject, microfilming, and magnetic tape storage systems. Practice will be given in the processing of materials, filing, indexing, alphabetizing, coding, creating filenames and filename extensions for electronic files, and storing and retrieving electronic data to and from directories and subdirectories. (Formerly BASS 61/BASS 161)
Transfer Credit: CSU

BCOT 162
BUSINESS SPELLING AND PROOFREADING SKILLS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.
This course is designed to teach and reinforce accurate spelling, vocabulary, word usage, and proofreading skills with a distinct business orientation. It emphasizes the business context of these basic communications skills, which are needed for integration into other courses such as typewriting, machine transcription, shorthand, office procedures, and court reporting. This course meets 54 hours of the English requirement for Court Reporting Certification. (Formerly BASS 62/BASS 162)
Transfer Credit: CSU

BCOT 163
MACHINE TRANSCRIPTION 4.5 UNITS
Class hours: 4 lecture/2 lab
Prerequisite: BCOT 61 or BCOT 131, BCOT 162 and BCOM 46 or equivalent courses with grades of Credit or "C" or higher. Ability to type 30 wpm.
Recommendation: Concurrent enrollment in BCOT 3T.
This is a course designed to teach the skills and knowledge necessary for the production of high-quality business documents through the transcription concept (from hand-written copy, from machine dictation, or from shorthand dictation) and for the development of proper machine dictation skills/procedures. The emphasis is on the development of language arts skills, skillful keyboarding, and accurate proofreading in producing quality finished documents on electronic equipment/microcomputers. (Formerly BASS 63/BASS 163)
Transfer Credit: CSU

BCOT 173/174
BUSINESS COMPUTERIZED OFFICE TECHNOLOGIES OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: 1 hour/week coordination class.
Corequisite: Enrollment in 7 or more units, including Business Computerized Office Technologies Occupational Work Experience, in a declared business major. Three units of Business Computerized Office Technologies Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester. Four units of Business Computerized Office Technologies Occupational Work Experience require 240 non-paid hours of work or 300 paid hours of work per semester.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Second, third, and fourth semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. These courses may be taken for a maximum of 15-16 units. (Formerly BASS 73/74/BASS 171/174)
Transfer Credit: CSU

BUSINESS COURT REPORTING/COMPUTERIZED SHORTHAND

(Business Division)

BUSC 1T (Not degree applicable)
CAT TUTORIAL LAB 0 UNITS
Class hours: 1.5 lab
Prerequisite: BUSC 192 or equivalent with a grade of Credit or "C" or higher.
Corequisite: One or more of the following courses: BUSC 119A, BUSC 119B, BUSC 119C, BUSC 119D, BUSC 119E and/or BUSC 119F
Recommendation: None.
This course assists development in computer-aided transcription applications in the court reporting courses. Students must attend 1.5 hours minimum per week and are limited to a maximum of three hours per week. (Formerly BUSC 8)

BUSC 2T (Not degree applicable)
COMPUTER-AIDED TRANSCRIPTION LAB 0 UNITS
Class hours: 1 lab
Prerequisite: None.
Corequisite: Enrollment in any Business Court Reporting course.
Recommendation: None.
This required court reporting computer lab gives the students the opportunity to transcribe lessons and tests under supervision. Students must attend one hour per week multiplied by the number of court reporting courses in which the students are enrolled that require this lab. (Formerly BUSC 10)

BUSC 3T (Not degree applicable)
BUSINESS COURT REPORTING-TYING LAB 0 UNITS
Class hours: 2 lab
Corequisite: One or more of the following courses: BUSC 57A, 57B, 114, 115, 116, 118, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 156, 157, 158, 159, 180, 181, or 192.
This required court reporting typing lab gives the students the opportunity to transcribe lessons and tests under supervision. Students must attend two hours minimum per week.
multiplied by the number of court reporting courses in which the students are enrolled that require this lab. (Formerly BUSC 11)

**BUSC 4T** (Not degree applicable)

**BUSINESS COURT REPORTING**

**TAPE LAB** 0 UNITS

Class hours: 2 lab
Corequisite: One or more of the following courses: BUSC 114, 115, 116, 118, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 152, 153, 154, 155, 156, 157, 158, 159, 180, 181, or 192.
This required court reporting tape lab gives the students an opportunity to increase speed and skill in practicing dictation from tapes and to gain exposure to increasingly difficult and specialized vocabularies. All Court Reporting students must enroll in this two-hour lab course. (Formerly BUSC 12)

**BUSC 5T** (Not degree applicable)

**CSR QUALIFYING EXAM**

**TRANSCRIPTION LAB** 0 UNITS

Class hours: 1 hr. lab arr.
Prerequisite: Stenotype speed of 190 wpm, typing speed of 60 wpm, and completion of 50 hours of court apprenticeship training.
Corequisite: BUSC 129 or BUSC 149.
Recommendation: None.
This course assists development in transcription of the CSR Qualifying Exam for students preparing to take the State CSR Exam. Students must attend one hour per week and are limited to a maximum of three hours per week. (Formerly BUSC 9)

**BUSC 50**

**COMPUTER-AIDED PROOFREADING** 2 UNITS

Class hours: 2 lecture/1 lab
Prerequisite: BUSC 192 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: BUSC 57A and BUSC 142 or equivalent with grades of Credit or “C” or higher.
This course is designed to help students acquire the skills necessary to proofread accurately and correct computer transcripts of legal proceedings. Proofreading is an essential step in the production of all computer-aided transcripts, including court records and deposition transcripts. This course may be taken for a maximum of 4 units. (Formerly BUSC 92.1)

**BUSC 57A**

**BEGINNING AURAL LANGUAGE SKILLS FOR COURT REPORTERS** 3 UNITS

Class hours: 3 lecture
Prerequisite: BUSC 140 and BUSC 141 or equivalent with grades of Credit or “C” or higher.
Corequisite: BUSC 2T and BUSC 3T.
Recommendation: BCOM 46 or equivalent with a grade of Credit or “C” or higher.
This course emphasizes 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 transcription. (Formerly BUSC 17)

**BUSC 57B**

**ADVANCED AURAL LANGUAGE SKILLS FOR COURT REPORTERS** 3 UNITS

Class hours: 3 lecture
Prerequisite: BUSC 57A, BUSC 140, and BUSC 141 or equivalent with grades of Credit or “C” or higher.
Corequisite: BUSC 2T and BUSC 3T.
Recommendation: BCOM 46 or equivalent with a grade of Credit or “C” or higher.
This course is a continuation of the study of the grammar, punctuation, and capitalization of spoken language with emphasis on further developing the students’ ability to analyze and correctly apply rules of punctuation, word usage, and spelling to increasingly complex sentence structures. Additional emphasis will be placed on the creation of stenotype machine outlines requisite for realtime computer transcription. (Formerly BUSC 17.1)

**BUSC 113**

**LEGAL TERMINOLOGY** 3 UNITS

Class hours: 3 lecture/1 lab
Prerequisite: BUSC 140 or equivalent with a grade of Credit or “C” or higher.
This course is designed to familiarize the students with legal terminology, which will prepare the students to become proficient in recognizing, using, and spelling legal terminology. This course will help the students master unfamiliar keying patterns and enhance the development of computerized shorthand skills. (Formerly BUSC 13)
Transfer Credit:CSU

**BUSC 114**

**MEDICAL TERMINOLOGY FOR MACHINE SHORTHAND** 3 UNITS

Class hours: 3 lecture/2 lab
Prerequisite: BUSC 142 or equivalent with a grade of Credit or “C” or higher.
Recommendation: MA 161 or equivalent with a grade of Credit or “C” or higher.
This course of study involves medical dictation at varying degrees of speed. Dictation will include words peculiar to the human anatomy, including the skeletal structure, and medical prefixes and suffixes. Definitions of these words, pronunciation, and accuracy of transcript will be stressed. Dictation will be given for examinations, diagnoses, laboratory investigations, patient case histories, operation reports, medical records, and autopsy reports. (Formerly BUSC 14)
Transfer Credit:CSU

**BUSC 115**

**MEDICAL SHORTHAND FOR COURT REPORTERS** 4 UNITS

Class hours: 4 lecture/1 lab
Prerequisite: BUSC 114 and BUSC 143 or equivalent with grades of Credit or “C” or higher.
Recommendation: MA 161 or equivalent with a grade of Credit or “C” or higher.
This course is designed to reinforce medical terminology and to build shorthand speed from dictation on familiar medical transcripts and other related material including medications, nuclear medicine, laboratory and X-ray procedures. (Formerly BUSC 15)
Transfer Credit:CSU

**BUSC 116**

**INTRODUCTION TO COURTROOM PROCEDURES** 4 UNITS

Class hours: 4 lecture/2 lab
Prerequisite: BUSC 144 or equivalent with a grade of Credit or “C” or higher.
This course is designed to give an overall view of the judicial system. In addition, the course content traces lawsuits and civil and criminal procedures from their inception through the trial and appeal. This course places emphasis on the court reporter’s role at each phase of the trial. (Formerly BUSC 16)
Transfer Credit:CSU
Announcement of Courses

BUSC 118
DEPOSITION PROCEDURES, CODES AND ETHICS 4 UNITS
Class hours: 4 lecture/2 lab
Prerequisite: BUSC 144 or equivalent with a grade of Credit or “C” or higher.
This course provides a thorough understanding of deposition procedures, ethics, reference techniques, management skills, and introduces the California Codes pertinent to depositions. This course provides an opportunity to develop management techniques and an understanding of professional practices. (Formerly BUSC 18)
Transfer Credit: CSU

BUSC 119A
BEGINNING COMPUTER-AIDED TRANSCRIPTION 2 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: BUSC 141 or equivalent with a grade of Credit or “C” or higher.
Corequisite: BUSC 1T and BUSC 142 or equivalent.
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 nontechanical dictionary building. Students will be required to have an electronic stenotype machine or purchase a Prowriter attachment for their stenotype machine to create personal dictionaries of approximately 20,000 words. This course may be taken for a maximum of 4 units. (Formerly BUSC 19.1)
Transfer Credit: CSU

BUSC 119B
INTERMEDIATE COMPUTER-AIDED TRANSCRIPTION 2 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: BUSC 119A or equivalent with a grade of Credit or “C” or higher.
Corequisite: BUSC 1T and BUSC 143 or equivalent.
This CAT course includes scoping, editing, transcribing, spelling checking, formatting, and printing a document. Students use the Prowriter attachment or electronic stenotype machine to continue preparing their personal dictionaries on a disk. This course may be taken for a maximum of 6 units. (Formerly BUSC 19.2)
Transfer Credit: CSU

BUSC 119C
ADVANCED COMPUTER-AIDED TRANSCRIPTION 2 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: BUSC 119B or equivalent with a grade of Credit or “C” or higher.
Corequisite: BUSC 1T and BUSC 144 or equivalent.
This advanced CAT course integrates taking verbatim proceedings with the Prowriter attachment or an electronic stenotype machine, sending the notes to the computer, then scoping, editing, printing, and electronically filing the final document. This course may be taken for a maximum of 6 units. (Formerly BUSC 19.3)
Transfer Credit: CSU

BUSC 119D
BASIC CONCEPTS OF REALTIME 2 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: BUSC 119C or equivalent with a grade of Credit or “C” or higher.
Corequisite: BUSC 1T.
Recommendation: None.
This course introduces students to the principles of realtime writing for computer-aided transcription (CAT). It provides a complete plan for analyzing personal writing techniques, developing a consistent writing style, and implementing a step-by-step plan to reinforce realtime writing using a current court reporting CAT software system. This course may be taken for a maximum of 6 units. (Formerly BUSC 19.4)
Transfer Credit: CSU

BUSC 119E
COMPUTER-AIDED MEDICAL DICTIONARY BUILD 2 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: BUSC 114 and BUSC 119B or equivalent with grades of Credit or “C” or higher.
Corequisite: BUSC 1T.
Recommendation: MA 161 or equivalent with a grade of Credit or “C” or higher.
This course is for students proficient in computerized machine shorthand writing skills and who are interested in a career path in legal transcription or court reporting. It provides a systematic approach toward building a basic personal medical dictionary. The dictionary entries include Latin and Greek prefixes, suffixes, and combining forms as well as medical terminology that will be created using a computer-aided transcription (CAT) software system. This course may be taken for a maximum of 6 units. (Formerly BUSC 19.5)
Transfer Credit: CSU

BUSC 119F
COMPUTER-AIDED LEGAL DICTIONARY BUILD 2 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: BUSC 119B or equivalent with a grade of Credit or “C” or higher.
Corequisite: BUSC 1T.
Recommendation: None.
This course is for students proficient in computerized machine shorthand writing skills and who are interested in a career path in legal transcription or court reporting. It provides a systematic approach toward building a basic legal computer-aided transcription (CAT) dictionary. Entries into the CAT dictionary include Latin and Greek prefixes, suffixes, roots, and combining forms of legal terminology used in various aspects of the legal system. This course may be taken for a maximum of 6 units. (Formerly BUSC 19.6)
Transfer Credit: CSU

BUSC 125
COMPUTERIZED SHORTHAND REALTIME PRACTICUM I (100-130 WPM) 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: BUSC 119C and BUSC 143 or equivalent with grades of Credit or “C” or higher.
Corequisite: BUSC 1T and BUSC 2T.
Recommendation: BUSC 119D or equivalent with a grade of Credit or “C” or higher.
This course continues intensive sustained dictation to improve realtime writing and computer transcription ability. Latin and French words, Congressional Record, multiple-voice testimony, legal opinions, and expert opinion materials in realtime are included. This course may be taken for a maximum of 6 units. (Formerly BUSC 25)
Transfer Credit: CSU

BUSC 126
COMPUTERIZED SHORTHAND REALTIME PRACTICUM II (120-150 WPM) 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: BUSC 119C and BUSC 144 or equivalent with grades of Credit or “C” or higher.
Corequisite: BUSC 1T and BUSC 2T.
Recommendation: BUSC 119D or equivalent with a grade of Credit or “C” or higher.
This course continues intensive sustained dictation to improve realtime writing and computer transcription ability. Latin and French words, Congressional Record, multiple-voice testimony, Final Argument, Opening Statement and Conference at the
Announcement of Courses

This course offers intensive sustained dictation to increase realtime capability and to prepare advanced students for the Certified Realtime Reporter (CRR) examination and various positions. Simulated courtroom proceedings will be used as a means to qualify for the State Boards. This course may be taken for a maximum of 12 units. (Formerly BUSC 29)
Transfer Credit: CSU

BUSC 130
COMPUTERIZED SHORTHAND
REALTIME PRACTICUM VI
(190-225 WPM) 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: BUSC 119C and BUSC 148 or equivalent with grades of Credit or “C” or higher.
Corequisite: BUSC 1T and BUSC 2T.
Recommendation: BUSC 119D or equivalent with a grade of Credit or “C” or higher.
This course offers the student intensive, sustained dictation to increase realtime accuracy, endurance, and speed. The student is prepared for the National Court Reporters Certified Realtime Reporter Examination (CRR). This course may be taken for a maximum of 12 units. (Formerly BUSC 30)
Transfer Credit: CSU

BUSC 139
EXPLORING CAREER OPPORTUNITIES
IN COURT REPORTING 1 UNIT
Class hours: 2 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides the new and continuing student an overview of the various career paths and emerging opportunities available to students who are interested in studying court reporting. Students are guided through an overview of current career paths available and through the process of developing a personalized education plan in court reporting. This course may be taken for a maximum of 2 units. (Formerly BUSC 39)
Transfer Credit: CSU

BUSC 140
COMPUTERIZED SHORTHAND THEORY 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: BCOM 46 or equivalent with a grade of Credit or “C” or higher.
Corequisite: BUSC 3T, BUSC 4T and BUSC 141.
Recommendation: Minimum typing speed of 35 wpm or enrollment in a typing class.
This course provides a continuing basis to further develop, refine, and improve machine
COMPUTERIZED SHORTHAND

Prerequisite: BUSC 143 or equivalent with a grade of Credit or "C" or higher. May be taken concurrently with BUSC 143 and BUSC 145. Corequisite: BUSC 1T, BUSC 2T, BUSC 3T, BUSC 4T, and BUSC 5T.
Recommendation: Minimum typing speed of 47 wpm or enrollment in a typing class.
This course continues intensive sustained dictation to increase machine shorthand speed and to improve transcription ability. Latin and French words, Congressional Record, multiple-voice testimony, legal opinions, and expert opinion materials are included. This course may be taken for a maximum of 6 units. (Formerly BUSC 43) Transfer Credit:CSU

BUSC 144
COMPUTERIZED SHORTHAND
SPEED BUILDING II
3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: BUSC 143 or equivalent with a grade of Credit or "C" or higher. May be taken concurrently with BUSC 143 and BUSC 145.
Corequisite: BUSC 1T, BUSC 2T, BUSC 3T, BUSC 4T, and BUSC 5T.
Recommendation: Minimum typing speed of 47 wpm or enrollment in a typing class.
This course continues intensive sustained dictation to increase machine shorthand speed and to improve transcription ability. Latin and French words, Congressional Record, multiple-voice testimony, legal opinions, and expert opinion materials are included. This course may be taken for a maximum of 6 units. (Formerly BUSC 43) Transfer Credit:CSU

BUSC 145
COMPUTERIZED SHORTHAND
SPEED BUILDING III
3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: BUSC 144 or equivalent with a grade of Credit or "C" or higher. May be taken concurrently with BUSC 144 and BUSC 146.
Corequisite: BUSC 1T, BUSC 2T, BUSC 3T, BUSC 4T, and BUSC 119C.
Recommendation: Minimum typing speed of 50 wpm or enrollment in a typing class.
This course continues intensive sustained dictation to increase machine shorthand speed and to improve transcription ability. Latin and French words, Congressional Record, multiple-voice testimony, Final Argument, Opening Statement, and Conference at the Bench broaden keying vocabulary. This course may be taken for a maximum of 9 units. (Formerly BUSC 44) Transfer Credit:CSU

BUSC 146
COMPUTERIZED SHORTHAND
SPEED BUILDING
(140-170 wpm)
3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: BUSC 145 or equivalent with a grade of Credit or "C" or higher. May be taken concurrently with BUSC 145 and BUSC 147.

Corequisite: BUSC 2T, BUSC 3T, and BUSC 4T.
Recommendation: Minimum typing speed of 55 wpm or enrollment in a typing class.
This course is designed to develop stenotype techniques and speed through the use of sustained dictation consisting of Congressional Record, literary, jury charge, and multiple-voice testimony. This course may be taken for a maximum of 9 units. (Formerly BUSC 46) Transfer Credit:CSU

BUSC 147
COMPUTERIZED SHORTHAND
SPEED BUILDING
(160-190 wpm)
3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: BUSC 146 or equivalent with a grade of Credit or "C" or higher. May be taken concurrently with BUSC 146 and BUSC 148.
Corequisite: BUSC 2T, BUSC 3T, and BUSC 4T.
Recommendation: 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. This course may be taken for a maximum of 9 units. (Formerly BUSC 46) Transfer Credit:CSU

BUSC 148
COMPUTERIZED SHORTHAND
SPEED BUILDING
(180-210 wpm)
3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: BUSC 147 and BUSC 185 or equivalent with grades of Credit or "C" or higher. May be taken concurrently with BUSC 147 and BUSC 149.
Corequisite: BUSC 2T, BUSC 3T, BUSC 4T, and BUSC 173.
Recommendation: Minimum typing speed of 60 wpm or enrollment in a typing class.
This course offers intensive sustained dictation to increase machine shorthand speeds and to prepare advanced students for the CSR examination and various positions. Simulated courtroom proceedings will be used as a means to qualify for the State Boards. This course may be taken for a maximum of 12 units. (Formerly BUSC 48) Transfer Credit:CSU

BUSC 149
COMPUTERIZED SHORTHAND
SPEED BUILDING
(190-225 wpm)
3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: BUSC 148 and BUSC 185 or equivalent with grades of Credit or "C" or higher. May be taken concurrently with BUSC 148.
Corequisite: BUSC 2T, BUSC 3T, BUSC 4T, and BUSC 5T.
Recommendation: Minimum typing speed of 60 wpm and completion of 50 hours of court apprenticeship. This course is designed to offer intensive sustained dictation to increase endurance and speed. In addition, this course offers a comprehensive academic review in preparation for the Certified Shorthand Reporters and the National Court Reporters examinations. This course may be taken for a maximum of 12 units. (Formerly BUSC 49) Transfer Credit:CSU

BUSC 152
INTRODUCTION TO JURY CHARGE INTERMEDIATE
COMPUTERIZED SHORTHAND
3 UNITS
Class hours: 6 lecture/12 lab (6 weeks)
Prerequisite: BUSC 140 and BUSC 141 or equivalent with grades of Credit or "C" or higher.
Corequisite: BUSC 2T and BUSC 4T.
Recommendation: Minimum typing speed of 40 wpm.
This short-term, intensive course is designed to introduce methodology of reporting and transcribing jury charge material and to develop punctuation skills, formatting techniques, and stenotype speed for this aspect of reporting. Sustained dictation consists of jury charge and two-voice testimony. This course develops proficiency in recording jury charge material at speeds ranging from 60-90 wpm. This course may be taken for a maximum of 6 units. (Formerly BUSC 52) Transfer Credit:CSU

BUSC 153
MULTIPLE-VOICE COLLOQUIY I
COMPUTERIZED SHORTHAND
SPEED BUILDING I
3 UNITS
Class hours: 6 lecture/12 lab (6 weeks)
Prerequisite: Minimum stenotype speed of 70 wpm.
Corequisite: BUSC 2T and BUSC 4T.
Recommendation: Minimum typing speed of 43 wpm.
This short-term, intensive course promotes the development of speed, accuracy, and
develops proficiency in recording colloquy at dictation consists of multiple-voice colloquy, jury charge, and two-voice testimony. This course may be taken for a maximum of 6 units. (Formerly BUSC 53)
Transfer Credit:CSU

BUSC 154
INTRODUCTION TO CONGRESSIONAL RECORD COMPUTERIZED SHORTHAND SPEED BUILDING II 3 UNITS Class hours: 6 lecture/12 lab (6 weeks) Prerequisite: Minimum stenotype speed of 90 wpm.
This short-term, intensive course introduces methodology of reporting and transcribing Congressional record material and develops punctuation skills, formatting techniques, and stenotype speed for this aspect of reporting. Sustained dictation consists of Congressional Record, jury charge, and two-voice testimony. This course develops proficiency in recording Congressional Record material at speeds ranging from 100-130 wpm. This course may be taken for a maximum of 6 units. (Formerly BUSC 54)
Transfer Credit:CSU

BUSC 155
MULTIPLE-VOICE COLLOQUY II COMPUTERIZED SHORTHAND SPEED BUILDING III 3 UNITS Class hours: 6 lecture/12 lab (6 weeks) Prerequisite: Minimum stenotype speed of 110 wpm.
This short-term, intensive course further promotes the development of speed, accuracy, and formatting techniques in reporting and transcribing increasingly complex multiple-voice colloquy. This course develops proficiency in recording colloquy at speeds ranging from 120-150 wpm. Sustained dictation consists of multiple-voice colloquy, jury charge, Congressional Record, and two-voice testimony. This course may be taken for a maximum of 9 units. (Formerly BUSC 55)
Transfer Credit:CSU

BUSC 156
JURY VOIR DIRE PROCEDURES COMPUTERIZED SHORTHAND SPEED DEVELOPMENT (140-170 WPM) 3 UNITS Class hours: 6 lecture/12 lab (6 weeks) Prerequisite: Minimum stenotype speed of 130 wpm.
This short-term, intensive course is designed to introduce methodology of reporting jury voir dire and to develop management techniques and stenotype speed for this aspect of reporting. The course develops proficiency in recording jury voir dire proceedings and jury charge at speeds ranging from 150-160 wpm. This course may be taken for a maximum of 9 units. (Formerly BUSC 56)
Transfer Credit:CSU

BUSC 157
CONGRESSIONAL TESTIMONY COMPUTERIZED SHORTHAND SPEED DEVELOPMENT (160-190 WPM) 3 UNITS Class hours: 6 lecture/12 lab (6 weeks) Prerequisite: Minimum stenotype speed of 150 wpm.
Corequisite: BUSC 2T, BUSC 3T, and BUSC 4T. Recommendation: Minimum typing speed of 60 wpm.
This short-term, intensive course promotes the development of speed and accuracy in taking dictation at the machine. Sustained dictation consists of Congressional Record, literary, jury charge, and multiple-voice testimony. This course also prepares advanced students for various state and city hearing reporter examinations. This course may be taken for a total of 9 units. (Formerly BUSC 57)
Transfer Credit:CSU

BUSC 158
PROFESSIONAL PRACTICES HEARINGS/ CONFERENCES COMPUTERIZED SHORTHAND SPEED DEVELOPMENT (180-210 WPM) 3 UNITS Class hours: 6 lecture/12 lab (6 weeks) Prerequisite: Minimum stenotype speed of 170 wpm.
Corequisite: BUSC 2T, BUSC 3T, and BUSC 4T. Recommendation: Minimum typing speed of 60 wpm.
This short-term intensive course is designed to introduce methodology of reporting hearings and conferences with multiple-speaker identification symbols and to develop management techniques and stenotype speed for this aspect of reporting. This course provides for the development of proficiency in writing multiple-voice dictation with an emphasis on hearings and conferences at speeds ranging from 180-210 wpm. This course may be taken for a maximum of 9 units. (Formerly BUSC 58)
Transfer Credit:CSU

BUSC 159
IN CURIA/ IN CAMERA PROCEDURES COMPUTERIZED SHORTHAND SPEED DEVELOPMENT (190-225 WPM) 3 UNITS Class hours: 6 lecture/12 lab (6 weeks) Prerequisite: Minimum stenotype speed of 180 wpm.
Corequisite: BUSC 2T, BUSC 3T, and BUSC 4T. Recommendation: Minimum typing speed of 60 wpm and completion of 50 hours of court apprenticeship.
This course offers an overall view of the mechanics of trials and applications of court procedures. Students are assisted in acquiring a mastery of creating verbatim records. In addition, the course offers sustained dictation on all aspects of criminal and civil trials to develop professionalism. This course may be taken for a maximum of 9 units. (Formerly BUSC 59)
Transfer Credit:CSU

BUSC 173/174
BUSINESS COURT REPORTING/ COMPUTERIZED SHORTHAND OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS Class hours: 1 lecture Prerequisite: None.
Corequisite: Enrollment in 7 or more units, including Business Court Reporting/Computerized Shorthand Occupational Work Experience, in a declared business major. Three units of Business Court Reporting/Computerized Shorthand Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester. Four units of Business Court Reporting/Computerized Shorthand Occupational Work Experience require 240 non-paid hours of work or 300 paid hours of work per semester. Recommendation: None.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates
greater communication with increased understanding between the student/workers, the college, and the employer/trainees. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. These courses may be taken for a maximum of 15-16 units. (Formerly BUSC 73/BUSC 74)

Transfer Credit: CSU

**BUSC 180**

**COMPUTERIZED SHORTHAND SPEED BUILDING (225 WPM) 3 UNITS**

Class hours: 2 lecture/4 lab

Prerequisite: Minimum stenotype speed of 190 wpm and typing speed of 60 wpm.

Corequisite: BUSC 2T, BUSC 3T, and BUSC 4T.

Recommendation: Strongly recommend completion of CSR academic requirements and Court Reporting CAT computer classes. This course is designed for potential Certified Shorthand Reporter Examination candidates and Registered Professional Reporter Examination candidates. It will provide intensive sustained dictation at 225-240 wpm to develop speed and endurance on the steno machine. This course may be taken for a maximum of 12 units. (Formerly BUSC 80)

Transfer Credit: CSU

**BUSC 181**

**COMPUTERIZED SHORTHAND SPEED BUILDING (240 WPM) 3 UNITS**

Class hours: 2 lecture/4 lab

Prerequisite: Minimum stenotype speed of 225 wpm and typing speed of 60 wpm.

Corequisite: BUSC 2T, BUSC 3T, and BUSC 4T.

Recommendation: Strongly recommend completion of CSR academic requirements and Court Reporting CAT computer classes. This course is designed for candidates for the Certified Shorthand Reporter examination, the Registered Professional Reporter examination, and the Registered Merit Reporter examination. It will provide intensive, sustained dictation at 240-260 wpm to develop speed, accuracy, and endurance on the steno machine. (Formerly BUSC 81)

Transfer Credit: CSU

**BUSC 185**

**CSR / RPR EXAMINATION PREPARATION 1.5 UNITS**

Class hours: 3 lecture (9 weeks)

Prerequisite: None.

Corequisite: None.

Recommendation: Strongly recommend completion of Certified Shorthand Reporter's academic requirements.

This course is designed for potential Certified Shorthand Reporter Examination candidates and Registered Professional Reporter Examination candidates. It will provide academic preparation and reinforcement in selected subject areas. This course may be taken for a maximum of 4.5 units. (Formerly BUSC 85)

Transfer Credit: CSU

**BUSC 190**

**MEDICAL TRANSCRIPTION I / COURT REPORTING METHOD 3 UNITS**

Class hours: 3 lecture/2 lab

Prerequisite: BUSC 114 and BUSC 142 or equivalent with grades of Credit or “C” or higher.

Corequisite: BUSC 119E

Recommendation: MA 161 or equivalent with a grade of Credit or “C” or higher.

This course matches the skilled stenotypist with the computer to generate typical and atypical medical reports for the medical and insurance industries. The course introduces the student to medical transcription format, equipment, and procedures, as well as standardized terminology in the areas of radiology, pathology, gerontology, obstetrics, physical therapy, hearing impairments, and pharmacology. Medico-legal ethics and medical reference books are also covered. This course may be taken for a maximum of 6 units. (Formerly BUSC 91)

Transfer Credit: CSU

**BUSC 191**

**MEDICAL TRANSCRIPTION II / COURT REPORTING METHOD 3 UNITS**

Class hours: 2.5 lecture/1.5 lab

Prerequisite: BUSC 119E, BUSC 190, and A&P 120 or equivalent with grades of Credit or “C” or higher.

Corequisite: BUSC 143 and BUSC 174 or equivalent.

Recommendation: MA 161 or equivalent with a grade of Credit or “C” or higher.

This course is for the advanced stenotypist using the computer to generate medical reports for the medical and insurance industries. This course incorporates acquisition and maintenance of equipment; modems as utilized by the medical transcriptionist; professional organizations and certifications; professional development; advanced medical transcription; as well as standardized terminology in the areas of pharmacology, surgery, nuclear medicine, oncology and/or chemotherapy, dentistry, and emergency room procedures. This course may be taken for a maximum of 6 units. (Formerly BUSC 91)

Transfer Credit: CSU

**BUSC 192**

**TRANSCRIPTION PROCE EDURES 2 UNITS**

Class hours: 2 lecture/1 lab

Prerequisite: BUSC 141 or equivalent with a grade of Credit or “C” or higher and the ability to type 40 wpm.

This course is designed to help students acquire the skills necessary to properly format transcript data of court proceedings. This formatting relates to all types of legal and court documents including deposition transcripts. This course may be taken for a maximum of 4 units. (Formerly BUSC 92)

Transfer Credit: CSU

**BUSC 193**

**BASIC CAPTIONING 4.5 UNITS**

Class hours: 4 lecture/2 lab

Prerequisite: BUSC 144 and BUSC 119B or equivalent with grades of Credit or “C” or higher.

Corequisite: BUSC 1T

Recommendation: None.

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; captioning over the Internet; students will develop new applications for this new and emerging technology which includes online and offline captioning, as well as open and closed captioning. This course includes hands-on captioning assignments designed to familiarize students with captioning software and application. This course may be taken for a maximum of 9 units.

Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
BUSINESS ENGLISH/WRITING
SEE BCOM
(Business Communications)

BUSINESS FINANCE
(Business Division)

BUSF 50
ELECTRONIC CALCULATORS/BUSINESS APPLICATIONS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
This course is designed to teach students how to properly operate electronic calculators. Students will learn how electronic display calculators work, how to properly enter data using the ten-key keyboard, and how electronic calculators are used in business to solve practical problems. Techniques learned in this class can be applied to data processing and accounting classes. (Formerly BUSF 15)

BUSF 51
RETIREMENT PLANNING AND INVESTING 1.5 UNITS
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces methods of computing amounts to be saved and invested in order to fund retirement. The course also discusses various retirement plans available. Additionally, students will learn techniques to research and evaluate mutual fund investment opportunities. (Formerly BUSF 30)

BUSF 125
PERSONAL FINANCE 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This survey course will cover the following topics: the management of personal income and expenditures; commercial and savings accounts; budgets; charge accounts; installment buying; and borrowing money; property, income, estate, inheritance, and gift taxes; life, health, accident, property, and miscellaneous insurance; pension plans and social security; owning a home; investing in securities and trust funds; and wills. This course can be taken in an online or an on-line learning environment. (Formerly BUSF 25)
Transfer Credit: CSU

BUSF 126
INTRODUCTION TO STOCK MARKET AND INVESTMENTS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course will cover the following subject areas: how to invest in the stock market; the various kinds of stocks, bonds, warrants, and rights; investment objectives; investment systems; the Broker's part in investment; stock exchanges; how stocks are traded and reported in the newspaper; investment vocabulary, mutual funds, and investment companies. (Formerly BUSF 26)
Transfer Credit: CSU

BUSINESS PARALEGAL
(Business Division)

BL 11T (Not degree applicable)
LEGAL-COMPUTER TUTORIAL 0 UNITS
Class hours: 1 hour per week as arranged
Prerequisite: BL 56 or CIS 102 or equivalent with a grade of Credit or "C" or higher.
Corequisite: Concurrent enrollment in one or more advanced Business Paralegal (BL) course.
This course is designed to assist development in computer applications in the advanced Business Paralegal courses. Students must attend one hour minimum per week and are limited to a maximum of three hours per week. (Formerly BL 21)

BL 52
LAW OFFICE MANAGEMENT 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: BL 56 or prior completion with a grade of Credit or "C" or higher.
Recommendation: None.
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 5)

BL 56
INTRODUCTION TO COMPUTERIZED LEGAL SOFTWARE 3 UNITS
Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: None.
This is an introductory course in the utilization of legal software. The student will use software in conjunction with a document control system that will include applications for the following law office functions: document maintenance, document retrieval, document construction, document billing, and document calendaring. (Formerly BL 9)

BL 57
LEGAL DOCUMENT PRODUCTION 3 UNITS
Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: None.
Corequisite: None.
Recommendation: BL 56 or BCOT 108 or equivalent with a grade of Credit or "C" or higher.
This is a course in the production of legal documents using WordPerfect. Topics covered include the development and production of client worksheets, fee agreements, fax forms, interrogatories, legal briefs, office newsletters, deposition summaries, pleadings, and trial notebooks. Students will create these legal documents on a computer. (Formerly BL 9.1)

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

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Announcement of Courses

BL 102
ADVANCED CALIFORNIA CIVIL PROCEDURES 3 UNITS
Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: BL 100 and BL 56 or equivalent with grades of Credit or “C” or higher.
This course continues the study of California Civil Procedures through the trial of a civil matter. Students will study the elements of discovery and develop a written discovery plan. Students will draft motions, judicial arbitration materials, trial briefs, and settlement proceedings. This is an optional course concentrating in advanced civil litigation and writing. (Formerly BL 3)
Transfer Credit: CSU

BL 103
LEGAL RESEARCH 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: BL 101 and BL 56 or equivalent with grades of Credit or “C” or higher.
This course is designed to introduce students to the basic techniques of legal research. Emphasis will be placed upon techniques of legal research including the use of the law library and the specific techniques of how to use the primary and secondary sources of the law, legal terms, research aids, and introduction to legal writing. Primary emphasis will be on the legal research in the state of California. (Formerly BL 4.1)
Transfer Credit: CSU

BL 104
ADVANCED LEGAL RESEARCH 3 UNITS
Class hours: 3 lecture
Prerequisite: BL 103 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
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 4.2)
Transfer Credit: CSU

BL 105
INTRODUCTION TO FEDERAL AND CALIFORNIA EMPLOYMENT, LABOR, AND WORKERS’ COMPENSATION LAW 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is an introduction to Federal and California employment, labor, and workers’ compensation laws that affect the relationship between employers and employees in the workplace. It provides an understanding for both employers and employees of their rights and obligations under these laws. (Formerly BL 14)
Transfer Credit: CSU

BL 106
BANKRUPTCY LAW 3 UNITS
Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: BL 56 or equivalent with a grade of Credit or “C” or higher.
Recommendation: BL 100, BL 101, and BA 111 or equivalent with grades of Credit or “C” or higher.
This course is an introduction to the Federal Bankruptcy law, with emphasis on Chapter 7 Bankruptcies, and discussions and introduction to Chapter 11 and 13 proceedings. The student will complete an entire Chapter 7 Bankruptcy petition and other documents and motions involving a bankruptcy case under the Bankruptcy Code. Included will be creditors’ claims and motions for relief of automatic stay. (Formerly BL 6)
Transfer Credit: CSU

BL 107
PROBATE PROCEDURES 3 UNITS
Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: BL 56 or equivalent with a grade of Credit or “C” or higher.
Recommendation: BL 100, BL 101, and BA 111 or equivalent with grades of Credit or “C” or higher.
This course acquaints the student with the procedures and laws governing the probate of estates, both testate and intestate, and with procedures to transfer decedent’s property without probate. Emphasis is placed upon correct completion of probate forms, notice requirements, and time limits. Procedures governing guardianship and conservatorship will also be covered. (Formerly BL 7)
Transfer Credit: CSU

BL 108
FAMILY LAW PROCEDURES 3 UNITS
Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: BL 56 or equivalent with a grade of Credit or “C” or higher.
Recommendation: BL 100, BL 101, and BA 111 or equivalent with grades of Credit or “C” or higher.
This course acquaints the student with the laws governing family relations and procedures for dissolution of marriage actions. These are: Order to Show Cause Hearings, Trials, and Post Dissolution Proceedings. Preparation of marital termination agreements, types of judgments, adoptions and custody agreements are also presented. (Formerly BL 8)
Transfer Credit: CSU

BL 109
TORTS AND PERSONAL INJURY LAW AND PROCEDURES 3 UNITS
Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: None.
Corequisite: None.
Recommendation: None.
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.
Transfer Credit: CSU

BL 112
ESTATE PLANNING FOR THE PARALEGAL 3 UNITS
Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: BL 56 or equivalent with a grade of Credit or “C” or higher.
Recommendation: BL 100, BL 101, and BA 111 or equivalent with grades of Credit or “C” or higher.
This course is an introduction to estate administration. The student will learn the legal theories relating to wills, trusts, succession, taxation, and probate. Document preparation will be required in the areas of wills, trusts, and estate plans. (Formerly BL 10)
Transfer Credit: CSU

BL 113
FUNDAMENTALS OF ALTERNATE DISPUTE RESOLUTIONS 3 UNITS
Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: BL 56 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: BL 100 or equivalent with a grade of Credit or “C” or higher.
This course is the study of the techniques that resolve disputes to avoid or circumvent a
trial in the California Court system. Students will draft the documents utilized in negotiations, mediation, neutral fact finding, contractual arbitration, judicial arbitration, and private judging. (Formerly BL 11)

Transfer Credit: CSU

BL 114
LA W ON THE INTERNET 1.5 UNITS
Class hours: 3 lecture +1 hr. lab arr. (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces the students to the basic techniques of using the Internet for legal research and career information. Students learn how to access and use the Internet. Emphasis is placed on search techniques including refining search queries and performing legal and career searches utilizing several web search engines. Federal and multi-state research materials will be used. (Formerly BL 12)

Transfer Credit: CSU

BL 115
ELDER LAW 3 UNITS
Class hours: 3 lecture +1 lab. hr. arr.
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces the student to the expanding legal area of elder law. Topics include ethical considerations, government benefits, health care decision making, Medicare and Medi-Cal benefits, home care versus residential care facilities, and protection from physical and/or fiduciary abuse. Upon completion of the course, students will be able to direct the elderly or their families to the appropriate government or private agency for assistance. (Formerly BL 13)

Transfer Credit: CSU

BL 116
CRIMINAL LAW 3 UNITS
Class hours: 3 lecture/1 hr. lab. arr.
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is an introduction to criminal law. Concepts covered include the legal system, elements of a crime, crimes against persons and property, defenses, searches and seizures, pre-trial and trial process, sentencing, corporate and white-collar crimes.

Transfer Credit: CSU

BL 120
LEGAL ETHICS 1.5 UNITS
Class hours: 1.5 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is a study of the major areas of legal ethics and rules of professional responsibility as they affect paralegal/legal assistants. The course also focuses on legal ethics as they apply to attorneys. The course will cover the substantive rules regarding the regulation of lawyers/paralegals, the unauthorized practice of law, issues of confidentiality and conflicts of interest, as well as advertising and solicitation.

(Formerly BL 20)

Transfer Credit: CSU

BL 171
BUSINESS PARALEGAL OCCUPATIONAL WORK EXPERIENCE 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: Enrollment in 7 or more units, including Business Paralegal Occupational Work Experience, in a declared business major. One unit of Business Paralegal Occupational Work Experience requires 60 non-paid hours or 35 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 for a maximum of 6 units. (Formerly BL 72)

Transfer Credit: CSU

BL 172
BUSINESS PARALEGAL OCCUPATIONAL WORK EXPERIENCE 2 UNITS
Class hours: 1 lecture
Prerequisite: None.
Corequisite: Enrollment in 7 or more units, including Business Paralegal Occupational Work Experience, in a declared business major. Two units of Business Paralegal Occupational Work Experience require 120 non-paid hours of work or 150 paid hours of work per semester.

Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers.

First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site.

Second, third, and fourth semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. These courses may be taken for a maximum of 15-16 units. (Formerly BL 73/74)

Transfer Credit: CSU

**BL 220**

**LANDLORD AND TENANT LAW 3 UNITS**

Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: BL 56 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.

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 22)

Transfer Credit: CSU

**BL 230**

**CORPORATE LAW 3 UNITS**

Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: BL 56 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.

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 23)

Transfer Credit: CSU

**BL 240**

**TORT LAW 1.5 UNITS**

Class hours: 1.5 lecture
Prerequisite: BL 56 or equivalent with a grade of Credit or “C” or higher.
Corequisite: BL 1T.
Recommendation: None.

This course includes the study of major areas of tort law. It includes detailed exploration of negligence, strict product liability, selected intentional torts, and special instances of negligence law. Class discussion and reading will emphasize study of the elements of proof of the prime face case for each tort and application of tort rules to factual situations. (Formerly BL 24)

Transfer Credit: CSU

**BL 250**

**LEGAL INTERVIEWING 1.5 UNITS**

Class hours: 1.5 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.

This course is the study of techniques for conducting client interviews, investigative strategies and tactics with emphasis on learning and avoiding evidence problems. Research evidence issues on various legal fields will be studied. (Formerly BL 25)

Transfer Credit: CSU

**BUSINESS REAL ESTATE**

(Business Division)

**BUSR 1T** (Not degree applicable)

**BUSINESS REAL ESTATE COMPUTER TUTORIAL 0 UNITS**

Class hours: 1 lab
Prerequisite: None.
Corequisite: BUSR 50.
Recommendation: None.

This course develops proficiency in computer applications in Business Real Estate. Students must attend one hour minimum per week and are limited to a maximum of three hours per week. (Formerly BUSR 13)

**BUSR 50**

**INTRODUCTION TO REAL ESTATE SOFTWARE 3 UNITS**

Class hours: 3 lecture
Prerequisite: BUSR 101 or equivalent with a grade of Credit or “C” or higher.

This course covers hands-on training using form filling of real estate contracts, rent versus buy, inputting properties into the Board of Realtors’ Multiple Listing Service, downloading available real estate offerings for presentation to buyers, amortization schedules, and cash flow projections of income producing properties (with emphasis on the mani pulaiton of real property values with the changes of loan interest rates, overall capitalization rates, and gross rent multiplier). (Formerly BUSR 12)

**BUSR 51**

**REAL ESTATE PRE-LICENSE 3 UNITS**

Class hours: 3 lecture
Prerequisite: BUSR 101 or equivalent with a grade of Credit or “C” or higher or concurrent enrollment.

This course covers materials used by the State of California Department of Real Estate in preparing test questions for Real Estate License examinations. The major topics studied are real estate law, real estate practice, real estate principles, real estate finance, real estate appraisal, real estate taxation, and real estate economics. (Formerly BUSR 15)

**BUSR 52**

**MORTGAGE LOAN BROKERING AND LENDING 3 UNITS**

Class hours: 3 lecture
Prerequisite: BUSR 101 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.

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 license. (Formerly BUSR 21)

**BUSR 53**

**ADVANCED REAL ESTATE APPRAISAL 3 UNITS**

Class hours: 3 lecture
Prerequisite: BUSR 131 or equivalent with a grade of Credit or “C” or higher.

This is an advanced course in real estate appraisal devoted to current techniques of estimating value. An income property will be chosen, visited, analyzed, and appraised. The creative development of a Narrative Appraisal Report will be taught, and its completion will be the goal of each student. All examples are or have been real life situations.
stress is placed on preparing the student to be able to walk into an appraisal office and begin appraising. Capitalization, reciprocals, Inwood Methods, land and building residual techniques, and Hoskold Theories are covered. (Formerly BUSR 32)

**BUSR 54
COMPUTERS IN REAL PROPERTY APPRAISAL PRACTICE 3 UNITS**
Class hours: 3 lecture/2 lab
Prerequisite: BUSR 53 or BUSR 131 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None
Recommendation: None.

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 33)

**BUSR 55
REAL ESTATE OFFICE ADMINISTRATION 3 UNITS**
Class hours: 3 lecture
Prerequisite: BUSR 101 or equivalent with a grade of Credit or “C” or higher.

This course is designed to acquaint the real estate licensee with skills necessary to manage a profitable and stable business. These skills include techniques in research; office organization; managerial decision making; establishing controls systems and policies; recruiting, selecting, and training of personnel; product marketing and other skills related to financing, expansion, and growth. (This course may be taken as a broker’s license requirement.) (Formerly BUSR 41)

**BUSR 56
PRACTICES OF ESCROW 3 UNITS**
Class hours: 3 lecture
Prerequisite: BUSR 151 or equivalent with a grade of Credit or “C” or higher.

This course is a study of the practices and procedures followed in processing escrows, with emphasis on real estate, familiarization and drawing of documents, title company practices and reports, taking an escrow, appraisals and closing statements. (Formerly BUSR 52)

**BUSR 101
REAL ESTATE PRINCIPLES 3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
This is a beginning course in real estate, which introduces the student to real estate fundamentals and principles. Major topics covered are: history of real estate in California, contracts, agency, introduction to financing, deeds, liens and encumbrances, escrow and title insurance, land descriptions, and real estate math. (Formerly BUSR 11)
Transfer Credit: CSU

**BUSR 120
REAL ESTATE FINANCE 3 UNITS**
Class hours: 3 lecture
Prerequisite: BUSR 101 or equivalent with a grade of Credit 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. (Required by law for applicants for Broker’s License.) (Formerly BUSR 20)
Transfer Credit: CSU

**BUSR 125
LEGAL ASPECTS OF REAL ESTATE 3 UNITS**
Class hours: 3 lecture
Prerequisite: BUSR 101 or BA 111 or equivalent with a grade of Credit 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. (Required by law for applicants for Broker’s License.) (Formerly BUSR 25)
Transfer Credit: CSU

**BUSR 130
REAL ESTATE PRACTICES 3 UNITS**
Class hours: 3 lecture
Prerequisite: None.

This course is designed to acquaint the students with everyday real estate practice; to familiarize them with forms used and with on-the-job problems; to keep them abreast of change in conditions in the real estate business, notably the money market, land utilization, and zoning; and to inform them of modern selling practices and techniques. (Required by law for applicants for Broker’s License.) (Formerly BUSR 30)
Transfer Credit: CSU

**BUSR 131
INTRODUCTION TO REAL ESTATE APPRAISAL 4 UNITS**
Class hours: 4 lecture
Prerequisite: BUSR 101 or equivalent with a grade of Credit 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 unit. This course includes preparation of and finalization of the Uniform Residential Appraisal Report. Students will learn to use the Uniform Residential Appraisal Report (URAR) with addendums for the single family residence report and will use the Small Residential Income Report for multiple units. This class includes the mandatory 15 hours of Uniform Standards of Professional Appraisal Practice (USPAP). The completion of 15 hours of study of Uniform Standards of professional Appraisal Practices (USPAP) is required for every classification of State Appraisal Licensing or Certification. This course will qualify for 69 hours of basic Appraisal Education toward the 90 hours necessary for Trainee License, the 120 hours required for Licensed or Certified Residential License, and the 180 hours required for the Certified General classification. (Formerly BUSR 31)
Transfer Credit: CSU

**BUSR 140
REAL ESTATE PROPERTY MANAGEMENT 3 UNITS**
Class hours: 3 lecture
Prerequisite: None.

The course illustrates how skilled management practice can assure the production of maximum financial yield to investment real estate. The students gain an overview of the many different types of properties in which they might become involved. The course considers the specific duties of management, including the establishment of rental schedule, merchandising available space, collecting rent, creating and supervising maintenance schedules and repairs, supervising all purchasing, developing a tenant relationship policy, and maintaining proper accounting records. In addition, the course includes Trust Fund Handling and Fair Housing, both required three-hour courses for real estate agent licenses. The course is
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additionaly approved for 45 hours of continuing education for real estate licenses, 51 hours of continuing education for certified and licensed Appraisers or 54 hours of basic education for real estate appraisers. Course may be taken as a broker’s license requirement. (Formerly BUSR 40)
Transfer Credit: CSU

BUSR 151
FUNDAMENTALS OF ESCROW 3 UNITS
Class hours: 8 lecture
Prerequisite: BUSR 101 or equivalent with a grade of 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. Attention is given to the value of an escrow as a means of facilitating the transfer of property for protection of the interests of the principals. This is a background course for real estate students and a prerequisite for more advanced courses in escrow. Course may be taken as a broker’s license requirement. (Formerly BUSR 51)
Transfer Credit: CSU

BUSR 157
REAL ESTATE INVESTMENTS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: None.
This course is designed to acquaint the students with real estate investments. Content will include commonly used forms, solving on-the-job problems, cash flow analysis including calculation of cash-on-cash return, net present value and internal rate of return, analysis of the client’s needs, and modern practices and techniques used in industry today.
Transfer Credit: CSU

BUSR 160
REAL ESTATE ECONOMICS 3 UNITS
Class hours: 3 lecture
Prerequisite: BUSR 101 or equivalent with a grade of C or higher.
This course covers principles and problems in urban development: basic methods of statistical analysis and interpretation, controlling land use, patterns of land use for commercial and industrial facilities, economic aspects of real estate investment theory, economic utilization and land resources, public housing, urban renewal and rehabilitation, and impact of environment controls. (Required for California Real Estate Broker’s License.) (Formerly BUSR 60)
Transfer Credit: CSU

BUSR 172
BUSINESS REAL ESTATE OCCUPATIONAL WORK EXPERIENCE/ CAREER INTERNSHIP 2 UNITS
Class hours: 1 hr./wk coordination class
Prerequisite: BUSR 101 or equivalent with a grade of C or C- or higher.
Corequisite: Enrollment in 7 or more units, including Business Real Estate Occupational Work Experience/Career Internship, in a declared business major. Two units of Business Real Estate Occupational Work Experience/Career Internship require 120 non-paid hours of work or 150 paid hours of work per semester.
Recommendation: None.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to exacting experiences in the workplace. The aim of the course is to assist students in becoming more productive workers. In the process of doing so, it creates greater communication with increased understanding between the broker/sponsors, student/trainees, and the college. First-semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Second, third, and fourth-semester students meet with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken for a maximum of 6 units. (Formerly BUSR 72)
Transfer Credit: CSU

BUSR 173/174
BUSINESS REAL ESTATE OCCUPATIONAL WORK EXPERIENCE/ CAREER INTERNSHIP 3-4 UNITS
Class hours: 1 lecture
Prerequisite: BUSR 101 or equivalent with a grade of C or C- or higher.
Corequisite: Enrollment in 7 or more units, including Business Real Estate Occupational Work Experience, in a declared business major. Three units of Business Real Estate Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester. Four units of Business Real Estate Occupational Work Experience require 240 non-paid hours of work or 300 paid hours of work per semester.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to exacting experiences in the workplace. The aim of the course is to assist students in becoming more productive workers. In the process of doing so, it creates greater communication with increased understanding between the broker/sponsors, student/trainees, and the college.
First-semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Second, third, and fourth semester students must meet weekly with the instructor until their participatory assignments and semester work projects have been approved. These courses may be taken for a maximum of 15-16 units. (Formerly BUSR 73/74)
Transfer Credit: CSU

CHEMISTRY
(Science/ Engineering/ Math Division)

CHEM 9T (Not degree applicable)
CHEMISTRY-TUTORIAL 0 UNITS
Class hours: 2 lab
Corequisite: Enrollment in any chemistry course.
This course is designed to facilitate the learning of chemical knowledge, skills, and concepts through individualized and mediated instruction. It is open to any student enrolled in any chemistry course. (Formerly CHEM 99)

CHEM 100
INTRODUCTORY CHEMISTRY 4 UNITS
Class hours: 3 lecture/2 lab/1 quiz
Prerequisite: MATH 40 or equivalent with a grade of C or C- or higher or satisfactory completion of Math Placement Process.
Recommendation: It is strongly recommended that the preceding prerequisite be completed within four years prior to the date of enrollment in CHEM 100.
This course is an introduction to the basic principles of inorganic and organic chemistry and biochemistry with their application to problems encountered in our everyday lives. The course includes the metric system, atomic structure, bonding, solutions, chemical reactions, hydrocarbons, functional
groups, carbohydrates, lipids, and proteins. It is designed to give a general introduction to fundamental concepts and to prepare students for majors in nursing, dental hygiene, physician assistant, physical therapy assistant, liberal arts, and technical fields. (Not open to those with credit in more advanced courses.) (Formerly CHEM 10)
Transfer Credit:CSU;UC

CHEM 105
CHEMISTRY FOR ELEMENTARY SCHOOL TEACHERS 1.5 UNITS
Class hours:1 lecture/2 lab
Prerequisite:MATH 100 or equivalent with a grade of Credit or “C” or higher or satisfactory completion of the Math Placement Process.
This course is an introduction to the basic principles of chemistry with application to problems encountered in everyday lives. The course includes the metric system, atomic structure, bonding, solutions, chemical reactions, simple and complex molecules, everyday organic and biochemical compounds. It is designed to give a general introduction to fundamental concepts and to prepare students for teaching at the elementary level.
Transfer Credit:CSU

CHEM 110
ELEMENTARY CHEMISTRY 4 UNITS
Class hours:3 lecture/1 quiz/2 lab
Prerequisite: MATH 80 or MATH 80B or equivalent with a grade of Credit or “C” or higher, or satisfactory completion of the Math Placement Process.
Recommendation: It is strongly recommended that the preceding prerequisite be completed within four years prior to the date of enrollment in CHEM 110.
This introductory inorganic chemistry course emphasizes basic principles, formulas, equations, and chemical math problems. It is designed for students with little or no previous chemistry and prepares students for CHEM 111, General Chemistry. (Formerly CHEM 2)
Transfer Credit:CSU;UC

CHEM 111 (CAN CHEM SEQ A)/(CAN CHEM 2) GENERAL CHEMISTRY 5 UNITS
Class hours:3 lecture/2 quiz/4 lab
Prerequisite: CHEM 110 or equivalent with a grade of Credit or “C” or higher and MATH 80 (or MATH 80B) or equivalent with grades of Credit or “C” or higher (satisfactory completion of the Math Placement Process may be substituted for MATH 80).
Recommendation: It is strongly recommended that all of the preceding prerequisites be completed within four years prior to the date of enrollment in CHEM 111.
This course is designed for science majors. It includes stoichiometry; properties and changes of state for gases, liquids and solids; solutions; colloids; equilibria of gases, weak acids and bases, and slightly soluble compounds. (Formerly CHEM 1.1)
Transfer Credit:CSU;UC

CHEM 112 (CAN CHEM SEQ A)/(CAN CHEM 4) GENERAL CHEMISTRY 5 UNITS
Class hours:3 lecture/2 quiz/4 lab
Prerequisite: CHEM 111 or equivalent with a grade of Credit or “C” or higher or equivalent.
Recommendation: It is strongly recommended that the preceding prerequisite be completed within four years prior to the date of enrollment in CHEM 112.
This course is designed for science majors and is a continuation of CHEM 111. It includes oxidation-reduction; electrochemistry; modern atomic structure and bonding; molecular geometry; coordination chemistry; nuclear chemistry; thermodynamics; kinetics and organic chemistry. The laboratory includes some qualitative analysis. (Formerly CHEM 1.2)
Transfer Credit:CSU;UC

CHEM 205 QUANTITATIVE ANALYSIS CHEMISTRY 4 UNITS
Class hours:2 lecture/2 quiz/4 lab
Prerequisite: CHEM 112 or equivalent with a grade of Credit or “C” or higher.
Recommendation: It is strongly recommended that the preceding prerequisite be completed within four years prior to the date of enrollment in CHEM 205.
This course is an introduction to theories and techniques of gravimetric, volumetric, colorimetric, and electro-analytic methods of analysis. The course is designed for majors in chemistry, engineering, medicine, dentistry, pharmacy, and laboratory technology. (Formerly CHEM 5)
Transfer Credit:CSU;UC

CHEM 211-212 ORGANIC CHEMISTRY 5-5 UNITS
Class hours:3-3 lecture/2-2 quiz/4-4 lab
Prerequisite: CHEM 112 or equivalent with a grade of Credit or “C” or higher.
Recommendation: It is strongly recommended that the preceding prerequisites be completed within four years prior to the date of enrollment in CHEM 211-212.
A year course in the properties and reactions of aliphatic and aromatic organic compounds with emphasis being placed on reaction mechanisms, fundamental principles and modern instrumental methods. The Laboratory will stress synthesis, techniques, and spectroscopic and qualitative analysis. (Formerly CHEM 7.1-7.2)
Transfer Credit:CSU;UC

CHEM 250L SPECIAL TOPICS IN CHEMISTRY 1 UNIT
Class hours:1 lab
Prerequisite: CHEM 111 or equivalent with a grade of Credit or “C” or higher.
This course is primarily for chemistry or related science majors. Individual research problems are explored using materials, equipment and techniques not available to larger classes. This course may be taken for a maximum of 2 units. (Formerly CHEM 30.16)
Transfer Credit:CSU;UC

CHILD DEVELOPMENT
(Health Occupations Division)

CD 50 ARTS AND CRAFTS FOR SCHOOL-AGE CHILDREN 2 UNITS
Class hours:1.5 lecture/1.5 lab
Prerequisite: None.
This course will present the principles and application of arts and crafts activities for school-age children and techniques for working with children with special needs. A variety of media and techniques will be explored and applied to projects appropriate for each group. This course meets the Department of Social Service Classification Indicator DS 5. (Formerly CD 21)

CD 110 CHILD DEVELOPMENT 3 UNITS
Class hours:3 lecture
Prerequisite: None.
This course will familiarize the student with principles of child development from conception through adolescence including behavior patterns and group interaction of children. The student will also learn the effect of family, peers, and society upon children at different ages and cultures. This course meets the Department of Social Service Classification Indicator DS 1. (Formerly CD 10)
Transfer Credit:CSU;UC

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
This course is designed to introduce students to various 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. 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
THE CHILD IN A PLURALISTIC SOCIETY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course covers the principles of implementing a bias-free, anti-bias, and multicultural curriculum for young children. Race, ethnicity, class, gender, exceptionality, and age will be discussed along with the social and cultural conditions that influence a young child's education. Emphasis will be placed on helping the child understand one's own culture as well as the culture of others. (Formerly CD 24)
Transfer Credit: CSU

CD 137
POSITIVE CHILD GUIDANCE 1.5 UNITS
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: CDEC 111 and CD 110 or equivalent with grades of Credit or "C" or higher.
This course covers the theories of behavior, guidance techniques, and effective communication. The emphasis will be on developing an understanding of children's behavior and encouraging positive self-esteem while helping the child work toward self-control. (Formerly CD 37)
Transfer Credit: CSU

CD 138
OBSERVATION AND ASSESSMENT OF CHILDHOOD BEHAVIOR 1.5 UNITS
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: CDEC 111 and CD 110 or equivalent with grades of Credit or "C" or higher.
This course covers the theories of observation and assessment of young and school-age children. Emphasis will be on understanding how assessment is an integral part of appropriate instruction and intervention. (Formerly CD 38)
Transfer Credit: CSU

CHILD DEVELOPMENT/EARLY CHILDHOOD
(Health Occupations Division)

CDEC 61
NUTRITION, HEALTH AND SAFETY IN CHILDREN'S PROGRAMS 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
This course offers an opportunity to study the attitudes and habits essential for the general physical health, mental health, and safety of teacher, parent, and child. Topics covered are nutrition, school menus, common childhood diseases, California State safety regulations, and other special health problems of Early Childhood Education Programs. Instruction includes health-protection resources provided by home, school, and community. This course meets the Department of Social Services Classification Indicator DS 7. (Formerly CDEC 25)
Transfer Credit: CSU

CDEC 62
CREATIVITY AND THE PRE-SCHOOL CHILD 2 UNITS
Class hours: 2 lecture, 1 lab
Prerequisite: CDEC 112 or equivalent with a grade of Credit or "C" or higher.
This course explores expressive art activities for the pre-school child presented experimentally and through lecture, discussion, and practicum. The major focus will be on facilitating personal self-expression through creative means, with the emphasis on the process as opposed to the product of the child's experiences. This course meets the Department of Social Service Classification Indicator DS 3. (Formerly CDEC 30)

CDEC 63
EARLY CHILDHOOD EXPERIENCES IN LANGUAGE ARTS AND SOCIAL SCIENCES 2 UNITS
Class hours: 2 lecture, 1 lab
Prerequisite: CDEC 112 or equivalent with a grade of Credit or "C" or higher.
This course will acquaint the student with language, literature, social sciences, and dramatic activities for pre-kindergarten children. Instruction will cover pre-reading, pre-writing, and the development of listening skills. This course meets the Department of Social Service Classification Indicator DS 3. (Formerly CDEC 32)

CDEC 64
EARLY CHILDHOOD EDUCATION PRACTICUM 3 UNITS
Class hours: 2 lecture, 3 lab
Prerequisite: CDEC 111 and CDEC 112 or equivalent with grades of Credit or "C" or higher.
This course is designed to provide opportunities for the student to observe children in a model child care program. It includes instruction and application of techniques of working with young children, parents, and staff. Weekly observations of curriculum applications are evaluated. This course meets the Department of Social Service Classification Indicator DS 3. (Formerly CDEC 35)
Transfer Credit: CSU

CDEC 65
MUSIC AND MOVEMENT FOR YOUNG CHILDREN 2 UNITS
Class hours: 2 lecture, 1 lab
Prerequisite: CDEC 112 or equivalent with a grade of Credit or "C" or higher.
This course focuses on principles and methods of providing creative musical and movement experiences for young 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 Service Classification Indicator DS 3. (Formerly CDEC 40)

CDEC 66
ADMINISTRATION AND SUPERVISION OF EARLY CHILDHOOD EDUCATION PROGRAMS 3 UNITS
Class hours: 3 lecture
Prerequisite: CD 110, CDEC 111, CDEC 112, and CDEC 113 or equivalent with grades of Credit or "C" or higher.
This course will acquaint the student with the
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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. (Formerly CDEC 50)

CDEC 67
ADVANCED ADMINISTRATION AND SUPERVISION OF EARLY CHILDHOOD EDUCATION PROGRAMS 3 UNITS
Class hours: 3 lecture
Prerequisite: CDEC 66 or equivalent with a grade of Credit or “C” or higher or equivalent. Corequisite: None.
Recommendation: Teaching experience
This course offers advanced information for administrators or directors in the child care professions. The student will explore legislative updates, current issues, families at risk, professionalism, Child Development Associates, National Association for the Education of Young Children Accreditation, and marketing strategies. This course meets the Department of Social Services Classification Indicator DS 6. (Formerly CDEC 51)

CDEC 111
PRINCIPLES AND PRACTICES IN EARLY CHILDHOOD EDUCATION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course provides a survey of the field of Early Childhood Education emphasizing history and recent trends. It includes an introduction to different types of programs and the vocational opportunities available. Field trips to schools for young children will be featured. This course meets the Department of Social Service Classification Indicator DS 3. (Formerly CDEC 10)
Transfer Credit: CSU

CDEC 112
EARLY CHILDHOOD EDUCATION CURRICULUM 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This introductory course presents current concepts in childhood curriculum development and implementation. Emphasis is placed on developmentally appropriate curricular practices for an effective program for young children. The student will construct curriculum and assess its appropriateness in meeting diverse needs, levels of functioning and interest of children. This course meets the Department of Social Service Classification Indicator DS 3. (Formerly CDEC 20)
Transfer Credit: CSU

CDEC 113
THE CHILD, FAMILY, AND COMMUNITY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This is a course for anyone who deals with children: parents, teachers, and professionals in human services. Topics discussed are the influences on children’s growth by the family, the school, day-care facilities, the peer group, the mass media, and the community. Also examined are how these forces interact to socialize and produce the child’s values, morals, attitudes, behavior and self-esteem. This course meets the Department of Social Service Classification Indicator DS 2. (Formerly CDEC 21)
Transfer Credit: CSU

CDEC 133
EARLY CHILDHOOD EXPERIENCES IN MATHEMATICS AND SCIENCE 2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: CDEC 112 or equivalent with a grade of Credit or “C” or higher.
This course will acquaint the student with developmentally appropriate mathematics and science activities for pre-kindergarten children. Activities for this age group in counting, sets, earth and life sciences, classification of objects, and cooking experiences will be presented. This course meets the Department of Social Service Classification Indicator DS 3. (Formerly CDEC 33)
Transfer Credit: CSU

CDEC 134A
HEADS UP! READING - EARLY STEPS TO READING SUCCESS COMPONENT A 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: CDEC 112 or equivalent with a grade of Credit or “C” or higher.
This course will acquaint the students with research based principles and practices for providing children birth through age five with a strong foundation in early reading and writing within a developmentally appropriate approach. Component A emphasizes language, reading and writing within a developmentally appropriate approach. Component B emphasizes language acquisition and the developmental continuum for listening, speaking, reading and writing. Students will be introduced to the concepts of goal setting for literacy. Completion of any two of three components of this course sequence meets the Department of Social Services Classification DS 3 Indicator. Any two of the three components of this course sequence in combination are equivalent to CDEC 63 - Early Childhood Experiences in Language Arts and Social Studies.
Transfer Credit: CSU

CDEC 134B
HEADS UP! READING - EARLY STEPS TO READING SUCCESS COMPONENT B 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: CDEC 112 or equivalent with a grade of Credit or “C” or higher.
This course will acquaint the students with research based principles and practices for providing children birth through age five with a strong foundation in early reading and writing within a developmentally appropriate approach. Component B emphasizes language development and how children’s books can add vocabulary and comprehension skills. Dramatic play situations will be introduced as well as field trips to increase language opportunities. Use of pre-writing and writing skills will also be included. Completion of any two of three components of this course sequence meets the Department of Social Services Classification DS 3 Indicator. Any two of the three components of this course sequence in combination are equivalent to CDEC 63 - Early Childhood Experiences in Language Arts and Social Studies.
Transfer Credit: CSU

CDEC 134C
HEADS UP! READING - EARLY STEPS TO READING SUCCESS COMPONENT C 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: CDEC 112 or equivalent with a grade of Credit or “C” or higher.
This course will acquaint the students with research based principles and practices for providing children birth through age five with a strong foundation in early reading and writing within a developmentally appropriate approach. Component C emphasizes the importance of the home school connection. Diversity issues involved in both receptive and expressive language are introduced. Students will develop and use materials that meet the children’s reading needs in a variety of ways. Completion of any two of three components of this course sequence meets the Department of
**Announcement of Courses**

Social Services Classification DS 3 Indicator. Any two of the three components of this course sequence in combination are equivalent to CDEC 63 – Early Childhood Experiences in Language Arts and Social Studies.

Transfer Credit: CSU

<table>
<thead>
<tr>
<th>CDEC 173/174</th>
<th>EARLY CHILDHOOD EDUCATION OCCUPATIONAL WORK EXPERIENCE</th>
<th>3-4 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class hours: One (1) hour control class each week plus 15 hours of employment per week for Early Childhood Education work experience 73 or 20 hours of employment per week for Early Childhood Education work experience 74. The employment must be in a job related to the student’s educational goal.</td>
<td>Prerequisite: None.</td>
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<tr>
<td>Corequisite: Enrollment in Child Development vocational program of 7 or more units in major including Occupational Work Experience.</td>
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<tr>
<td>Occupational Work Experience is a supervised employment program in an approved work station related to the student’s declared major. Students meet with their instructor for a minimum of one hour per week and will receive credit for on-the-job learning experiences that are new or are an expansion of their regular responsibilities. This course may be repeated for a maximum of 8 units based on the number of hours on the job.</td>
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<tr>
<td>This course meets the Department of Social Service Classification Indicator DS 3. (Formerly CDEC 73/74)</td>
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<td>Transfer Credit: CSU</td>
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<table>
<thead>
<tr>
<th>CDEC 230</th>
<th>ADULT SUPERVISION IN CHILD CARE PROGRAMS</th>
<th>3 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class hours: 3 lecture</td>
<td>Prerequisite: CD 110, CDEC 111, CDEC 112, and CDEC 113 or equivalent with grades of Credit or “C” or higher.</td>
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<tr>
<td>Corequisite: None.</td>
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<tr>
<td>Recommendation: None.</td>
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<tr>
<td>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. (Formerly CDEC 52)</td>
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<td>Transfer Credit: CSU</td>
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**CHILD DEVELOPMENT/FAMILY CHILD CARE**

(Health Occupations Division)

<table>
<thead>
<tr>
<th>CDFC 10</th>
<th>(Not degree applicable) FAMILY CHILD CARE PROVIDERS</th>
<th>3 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class hours: 3 lecture</td>
<td>Prerequisite: None.</td>
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</tr>
<tr>
<td>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.</td>
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**CHILD DEVELOPMENT/INFANT TODDLER**

(Health Occupations Division)

<table>
<thead>
<tr>
<th>CDIT 50</th>
<th>INFANT/ TODDLER CARE GIVING</th>
<th>3 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class hours: 3 lecture</td>
<td>Prerequisite: CD 110 or equivalent with a grade of Credit or “C” or higher.</td>
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</tr>
<tr>
<td>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 Service Classification Indicator DS 4. (Formerly CDIT 10)</td>
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<table>
<thead>
<tr>
<th>CDIT 51</th>
<th>INFANT AND TODDLER DEVELOPMENT</th>
<th>3 UNITS</th>
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</thead>
<tbody>
<tr>
<td>Class hours: 3 lecture</td>
<td>Prerequisite: None.</td>
<td></td>
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<tr>
<td>Corequisite: None.</td>
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<tr>
<td>Recommendation: CD 110 or equivalent with a grade of Credit or “C” or higher.</td>
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<tr>
<td>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 Service Classification Indicator DS 4.</td>
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</table>

**CDIT 52**

INFANT AND TODDLER PROGRAMS | 3 UNITS |

Class hours: 3 lecture | Prerequisite: CDIT 51 or equivalent with a grade of Credit or “C” or higher. |
Corequisite: None. |
Recommendation: CD 110 or equivalent with a grade of Credit or “C” or higher. |
This course explores program models for children from birth to three years of age, addressing program goals, philosophies, curriculum, building relationships with infants, toddlers and families, safety routines, physical space and equipment, as well as infant and family needs especially in a group setting. This course meets the Department of Social Service Classification Indicator DS 4.

**CHILD DEVELOPMENT/ SCHOOL AGE**

(Health Occupations)

<table>
<thead>
<tr>
<th>CDSA 152</th>
<th>SCHOOL-AGE CHILD CARE SUPERVISION AND ADMINISTRATION</th>
<th>3 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class hours: 3 lecture</td>
<td>Prerequisite: CD 110 or equivalent with a grade of Credit or “C” or higher.</td>
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<tr>
<td>This course presents the principles of administration and supervision of school-age child care programs. Emphasized are the role of the director, teacher, and aide, laws and regulations; and a study of objectives, curricula, developmental needs, and other key factors for operating such programs. The unique features of before-and-after-school care as opposed to the regular school day will be stressed. This course meets the Department of Social Service Classification Indicator DS 6. (Formerly CDSA 10)</td>
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<td>Transfer Credit: CSU</td>
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<table>
<thead>
<tr>
<th>CDSA 155</th>
<th>SCHOOL-AGE CHILD CARE ACTIVITIES</th>
<th>3 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class hours: 3 lecture</td>
<td>Prerequisite: None.</td>
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</tr>
<tr>
<td>This course presents activities for the 6-12 year-old child in an extended day care setting. Focus is on cognitive, physical, psychosocial, and creative aspects of development, as well as positive approaches to guidance. This course meets the Department of Social Service Classification Indicator DS 5. (Formerly CDSA 20)</td>
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<td>Transfer Credit: CSU</td>
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All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
CDSA 259
SCHOOL-AGE CHILD CARE
PRACTICUM 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: CDSA 155 or equivalent with a grade of Credit or "C" or higher.
This course provides practical experiences in an extended day care program. It includes observation of behaviors exhibited by the school-age child and the opportunity to assist the teacher in the Center. Basic instruction includes guidance, room environment, tutoring, record keeping and other extended day care responsibilities. This course meets the Department of Social Service Classification Indicator DS 5. (Formerly CDSA 35)
Transfer Credit: CSU

CHILD DEVELOPMENT/ PARENT EDUCATION
(Health Occupations Division)

CDPE 10 (Not degree applicable)
INTRODUCTION TO FAMILY DEVELOPMENT 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course offers the student a comprehensive introduction to the process of parenting from conception through adolescence. It offers an appreciation of challenges and pleasures of parenting as well as practical solutions to common problems.

CHILD DEVELOPMENT/ SPECIAL EDUCATION
(Health Occupations Division)

CDSE 50
SURVEY OF SPECIAL EDUCATION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is a survey of the field of special education emphasizing the role of the Special Education Assistant in the training of the exceptional individual. It will include an introduction to the types of handicapped children and adults, the function of the assistant and the vocational opportunities available. Field trips will be an important part of the instructional program. (Formerly CDSE 10)

CDSE 51
SPECIAL EDUCATION ENVIRONMENT 3 UNITS
Class hours: 1 lecture/6 lab
Prerequisite: CDSE 50 or equivalent with a grade of Credit or "C" or higher.
This course offers an opportunity for the student assistant to observe and participate in programs for learning disabled and in special day classes. Programs for the educationally handicapped at public and private educational facilities, sheltered workshops, and residential facilities are discussed. (Formerly CDSE 35)

CDSE 52
SPECIAL EDUCATION INCLUSION IN EARLY CHILDHOOD PROGRAMS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is a comprehensive overview of early childhood inclusion as it applies to children from birth to age eight. It offers a broad study of early childhood special education as it relates to inclusion. The course will cover federal and state laws and regulations, terminology and definitions, appropriate practices and interventions, behavioral issues, family support and guidance and "whole child/whole family" approach to inclusion success.

CDSE 73/74
SPECIAL EDUCATION ASSISTANT OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Special Education Assistant work experience 73 or 20 hours of employment per week for Special Education Assistant work experience 74. The employment must be in a job related to the student's educational goal.
Prerequisite: None.
Corequisite: Enrollment in the Special Education Assistant vocational program with 7 or more units including occupational work experience.
Occupational Work Experience is a supervised employment program in an approved work station related to the student's declared major. Students meet with their instructor for a minimum of one hour per week and will receive credit for on-the-job learning experiences that are new or are an expansion of their regular responsibilities. These courses may be repeated for a maximum of 8 units based on the number of hours on the job.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Announcement of Courses

CIS 5B (Not degree applicable)
BUSINESS COMPUTER
INFORMATION SYSTEMS
SPREADSHEET MODULE 0.5 UNITS
Class hours: 1.5 lecture/2.5 lab (4 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: Fluency in Spanish is strongly recommended.
This course instructs the students, in a bilingual mode (Spanish), in the use of microcomputers within the business environment using the Microsoft Window interface and the Microsoft Office Professional application suite (Word, Excel, Access, and PowerPoint). Students learn basic aspects of microcomputer software applications using a modular approach. The module will include topics in file management, creation/maintenance of backups, formatting disks, and the basic concepts and use of a spreadsheet application. This course may be taken for a maximum of 1.0 unit. (Not open to students with credit in CIS 102 (Formerly BCIS 15/BCIS 15.2)

CIS 5C (Not degree applicable)
BUSINESS COMPUTER
INFORMATION SYSTEMS
DATABASE MODULE 0.5 UNITS
Class hours: 1.5 lecture/2.5 lab (4 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: Fluency in Spanish is strongly recommended.
This course instructs the students, in a bilingual mode (Spanish), in the use of microcomputers within the business environment using the Microsoft Window interface and the Microsoft Office Professional application suite (Word, Excel, Access, and PowerPoint). Students learn basic aspects of microcomputer software applications using a modular approach. The module will include topics in file management, creation/maintenance of backups, formatting disks, and the basic concepts and use of a database application. This course may be taken for a maximum of 1.0 unit. (Not open to students with credit in CIS 102 (Formerly BCIS 15/BCIS 15.2)

CIS 5D (Not degree applicable)
BUSINESS COMPUTER
INFORMATION SYSTEMS
POWERPOINT/INTERNET 0.5 UNITS
Class hours: 1.5 lecture/2.5 lab (4 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: Fluency in Spanish is strongly recommended.
This course instructs the students, in a bilingual mode (Spanish), in the use of microcomputers within the business environment using the Microsoft Window interface and the Microsoft Office Professional application suite (Word, Excel, Access, and PowerPoint). Students learn basic aspects of microcomputer software applications using a modular approach. The module will include topics in file management, creation/maintenance of backups, formatting disks, and the basic concepts and use of a spreadsheet application. This course may be taken for a maximum of 1.0 unit. (Not open to students with credit in CIS 102 (Formerly BCIS 15/BCIS 15.2)

CIS 50 BASIC COMPUTER LITERACY 0.5 UNIT
Class hours: 4 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides the student with a basic overview of the components of a computer and application software. This course is for the student who is not familiar with the use of the computer and its applications. Topics will include a basic introduction to computer systems hardware, Windows, Word, Excel, and Powerpoint. The class stresses hands-on use of the computer with its applications. (Formerly BCIS 69.30/BCIS 51)

CIS 52 DATA PROCESSING MATHEMATICS 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the Math Placement Process or MATH 40 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
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. (Formerly BCIS 30)

CIS 53 MICROSOFT POWERPOINT 1.5 UNITS
Class hours: 3 lecture/2 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 102 or CIS 105 or equivalent with a grade of Credit or “C” or higher.
This is a course in presentation graphics using Microsoft PowerPoint. Topics covered include the process of creating, managing, and delivering a presentation. Students will produce conceptual and data-intensive presentations, create professional output for 35mm color slides, overheads, on-screen presentations, speaker notes, and handouts incorporating text and graphics. (Formerly BCIS 69.26/BCIS 12)

CIS 54A EXCEL FOR WINDOWS - PART 1 1.5 UNITS
Class hours: 3 lecture/2 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 105 or equivalent with a grade of Credit 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. (Formerly BCIS 11.1)

CIS 54B EXCEL FOR WINDOWS - PART 2 1.5 UNITS
Class hours: 3 lecture/2 lab (9 weeks)
Prerequisite: CIS 54A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course continues to explore the functions of the Microsoft Excel for Windows spreadsheet. The fundamentals of building worksheets will include creating worksheets, formatting, functions, formulas, macros, data tables, analysis tools, and the creation of charts. Techniques to deal with multiple worksheets and large worksheets will be...
CIS 56 MICROCOMPUTER DISK OPERATING SYSTEMS 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 101 or CIS 102 or equivalent with a grade of Credit or “C” or higher.
This course is designed to acquaint the student with the functions of the major operating systems used on microcomputers in the business environment. The course will focus upon MS-DOS. Students will learn to use the operating system and its supporting utilities as a tool to make them more proficient users of the microcomputer as a business tool. This course is not open to students with credits in BCIS 20.01. (Formerly BCIS 69.6/BCIS 20)

CIS 57 ADVANCED TOPICS IN MICROCOMPUTER DISK OPERATING SYSTEMS 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 56 or equivalent with a grade of Credit or “C” or higher.
This course is designed to extend the student's knowledge and skills in dealing with advanced aspects of disk operating systems in the business environment for IBM-type microcomputer hardware platforms. Coursework will include designing custom working environments using the tools included with the operating systems as well as those provided by outside vendors. This course will also involve creating and using small customized utilities written with DEBUG and assembler. (Formerly BCIS 21)

CIS 70A NETWORKING FUNDAMENTALS 2.5 UNITS
Class hours: 4.5 lecture/1.5 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 101, EL 114, and EL 114L or equivalent with grades of Credit or “C” or higher, or appropriate work experience.
This is a survey course about the computer networking and telecommunications industry. Topics covered include the seven layers of the Open Systems Interconnection Model (OSI), network architectures, internetworking and telecommunications. (Formerly NTO 5.1)

CIS 70B LOCAL AREA NETWORKS 2.5 UNITS
Class hours: 4.5 lecture/1.5 lab (9 weeks)
Prerequisite: CIS 70A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course covers the general concepts of Local Area Networks (LANs). Topics covered include LAN physical architectures, Network Operating System (NOS) architectures, and how local networks may be extended to cover wide areas. (Formerly NTO 5.2)

CIS 70C WIDE AREA NETWORKS 2.5 UNITS
Class hours: 4.5 lecture/1.5 lab (9 weeks)
Prerequisite: CIS 70B or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course introduces technologies used to implement a Wide Area Network (WAN). Topics discussed include modems, point-to-point services, Frame Relay, Integrated Services Digital Network (ISDN), Metropolitan Area Networks (MAN), Fibre Channel, and Asynchronous Transfer Mode (ATM). (Formerly NTO 5.3)

CIS 70D NETWORKING ARCHITECTURES 2.5 UNITS
Class hours: 4.5 lecture/1.5 lab (9 weeks)
Prerequisite: CIS 70C or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is an overview of the networking architectures commonly used in the networking industry. The architectures introduced are Transport Control Protocol/Internet Protocol (TCP/IP), System Network Architecture (SNA), Apple Talk, and Digital Equipment Corporation's network (DECnet). (Formerly NTO 5.4)

CIS 70E INTERNETWORKING DEVICES 2.5 UNITS
Class hours: 4.5 lecture/1.5 lab (9 weeks)
Prerequisite: CIS 70D or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course gives a broad overview of the computer networking industry with emphasis on internetworking. Topics discussed include Virtual Local Area Networks (VLANs), network management, and various internetworking hardware devices, repeaters, hubs, bridges, switches, routers, and gateways. (Formerly NTO 5.6)

CIS 70F NETWORKING PROCESSES AND PROTOCOLS 2.5 UNITS
Class hours: 4.5 lecture/1.5 lab (9 weeks)
Prerequisite: CIS 70E or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is an advanced course in computer networking. Concepts addressed in previous courses in this series are investigated in greater depth. Topics of discussion include the Open System Interconnection (OSI) model, network addressing, data link layer protocols, network layer protocols, transport layer protocols, upper layer protocols, and client/server information transfer. (Formerly NTO 5.7)

CIS 70H NETWORKING ANALYSIS AND DESIGN 2.5 UNITS
Class hours: 4.5 lecture/1.5 lab (9 weeks)
Prerequisite: CIS 70F or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course focuses on the design process for computer networking. Concepts and skills developed in previous courses in this series form the foundation for approaching the task of defining network requirements, writing specifications, designing, and implementing a computer network. (Formerly NTO 5.8)

CIS 72 TCP/IP ON MICROSOFT WINDOWS NT 1.5 UNITS
Class hours: 3 lecture/2 lab (9 weeks)
Prerequisite: CIS 70A, CIS 212 or CIS 212A and or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course provides students with the knowledge and skills required to set up, configure, use, and support Transmission Control Protocol/Internet Protocol (TCP/IP) on Microsoft Windows NT operating system. It is intended for those who support or administer Microsoft Windows NT Server and Windows NT Workstation in a TCP/IP environment. This course is compliant with current industry certification. (Formerly BCIS 82.1)
**CIS 75**
**SQL ADMINISTRATION AND IMPLEMENTATION** 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 212 or equivalent with a grade of Credit or “C” or higher is strongly recommended.
This course provides students with the knowledge and skills required to install, configure, administer, troubleshoot, and implement the Microsoft SQL server database management system. (Formerly BCIS 68)

**CIS 80**
**PROGRAMMING IN ACCESS** 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 155 and CIS 171 or equivalent with grades of Credit or “C” or higher are strongly recommended.
This course provides students with the knowledge and skills required to program Access applications using Visual Basic for Application. The students will design and create real-world business applications. (Formerly BCIS 25)

**CIS 82**
**VISUAL BASIC SCRIPTING** 1.5 UNITS
Class hours: 3 lecture/2 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 171 and CIS 205 or equivalent with grades of Credit or “C” or higher are strongly recommended.
This course provides students with the knowledge and skills required to create interactive web pages using Microsoft Internet technologies. The students will learn how to program in VBScript. (Formerly BCIS 48)

**CIS 84**
**MICROSOFT INTERNET INFORMATION SERVER** 1.5 UNITS
Class hours: 3 lecture/2 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: Strongly recommend CIS 212 or CIS 212B and CIS 72 or equivalent with grades of Credit or “C” or higher.
This course covers the support of the various features of Microsoft Internet Information Server (IIS). Students will learn how to install, configure, and implement the key components that comprise IIS. They will also have hands-on experience setting up a Web site. The course is intended for those who support or administer Microsoft Internet Information Server. The course uses a combination of lectures, demonstrations, discussions, online assignments, and hand-on labs. This course is compliant with current industry certification. (Formerly BCIS 94.1)

**CIS 101**
**INTRODUCTION TO COMPUTER INFORMATION SYSTEMS** 3 UNITS
Class hours: 3 lecture/1 hr. lab. arr.
Prerequisite: None.
Corequisite: None.
This course provides the student with the essential knowledge required for a well-rounded understanding of the use of the computer as a tool to produce useful information in small and large work environments. The course allows the student to achieve an understanding of computer technology, computer hardware, computer software, and how computers can be used to produce meaningful information. The student will solve applied problems in spreadsheet preparation and analysis using Microsoft EXCEL and in database programming using Access. (Formerly BCIS 40)
Transfer Credit: CSU

**CIS 102**
**INTRODUCTION TO MICROCOMPUTER HARDWARE AND APPLICATIONS SOFTWARE** 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
This course instructs the students in the use of microcomputers within an organizational environment using the Microsoft Windows interface and current applications software. Software topics include file management, elementary word processing, applications in spreadsheet use, database management, and presentation graphics. (Formerly BCIS 15)
Transfer Credit: CSU

**CIS 103**
**COMPUTER PROGRAMMING LOGIC** 3 UNITS
Class hours: 3 lecture/1 hr. lab. arr.
Prerequisite: None.
Corequisite: None.
Recommendation: Concurrent enrollment in or completion of CIS 101 or CIS 102 or equivalent with a grade of Credit or “C” or higher.
This is an introductory course in computer program flowcharting and programming languages. Computer program flowcharting concepts will be developed, beginning with the most basic of programs and gradually developing the acumen to handle complex business applications. In addition, the BASIC programming language will be utilized to code and debug flowcharting logic on the computer. (Formerly BCIS 56)
Transfer Credit: CSU

**CIS 105**
**USING MICROSOFT WINDOWS** 1.5 UNITS
Class hours: 3 lecture/1 hr. lab. arr. (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 102 or equivalent with a grade of Credit or “C” or higher.
This course covers the use of Microsoft Windows. Currently available Windows Operating Systems will be explored, including Windows 95, 98, NT, Millennium Edition, and Windows 2000. Topics include file and application management, personalizing the system, using the productivity tools, connecting to the Internet, and exchanging data. Current topics of interest relating to Windows will also be discussed. (Formerly BCIS 69.27/BCIS 34).
Transfer Credit: CSU

**CIS 110**
**INTRODUCTION TO DESKTOP PUBLISHING—MICROSOFT PUBLISHER** 1.5 UNITS
Class hours: 3 lecture/2 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 105 or equivalent with a grade of Credit or “C” or higher.
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. (Formerly BCIS 69.28/BCIS 13)
Transfer Credit: CSU

**CIS 120**
**WEB DESIGN WITH MICROSOFT FRONTPAGE** 1.5 UNITS
Class hours: 3 lecture/2 lab (9 weeks)
Prerequisite: CIS 121 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course covers the features and capabilities of FrontPage. Students learn how to...
CIS 121
**INTRODUCTION TO THE INTERNET** 1.5 UNITS
Class hours: 3 lecture +1 hr. lab. arr. (9 weeks)

Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will cover the fundamental features of the Internet. Students will learn how to access and use the Internet. Features covered in the course will include electronic mail, File Transfer Protocols (Anonymous FTP), Gopher, Jughead, World Wide Web, newsgroups, BBS (Bulletin Board Service) and other resources. Research resources are available on the Internet. (Formerly BCIS 69.24/BCIS 82)
Transfer Credit: CSU

CIS 125
**JAVASCRIPT PROGRAMMING** 1.5 UNITS
Class hours: 3 lecture/2 lab (9 weeks)
Prerequisite: CIS 205 and a knowledge in one programming language or equivalent with grades of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
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 BCIS 94.) (Formerly BCIS 91)
Transfer Credit: CSU

CIS 140
**QUERY/400** 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 141 or equivalent with a grade of Credit or "C" or higher.
This course will cover the fundamental operations and functions of data manipulation on the IBM AS/400. Query/400 will be used to select, arrange, and analyze information (data) stored in one or more databases. (Formerly BCIS 31)
Transfer Credit: CSU

CIS 141
**AS/400 OPERATIONS** 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 101 or equivalent with a grade of Credit or "C" or higher.
This course introduces the student to the operations of the IBM AS/400 Computer System using the OS/400 operating systems. The course includes the following topics: system security, job scheduling, backup/restore, work management, library management, object management, control management, and control language programming. (Formerly BCIS 69.23/BCIS 23)
Transfer Credit: CSU

CIS 142A
**AS/400 OPERATIONS-PART 1** 1.5 UNITS
Class hours: 3 lecture/2 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 101 or equivalent with a grade of Credit or "C" or higher.
This course introduces the student to the operations of the IBM AS/400 Computer System using the OS/400 operating system. The course includes the following topics: system security, job scheduling, job management, back/restore, work management, library management, object management, hardware architecture and configuration, software, device management, and control language. (Formerly BCIS 23.1)
Transfer Credit: CSU

CIS 142B
**AS/400 OPERATIONS/FACILITIES-PART 2** 1.5 UNITS
Class hours: 3 lecture/2 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 101 or equivalent with a grade of Credit or "C" or higher.
This course introduces the student to the 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. (Formerly BCIS 23.2)
Transfer Credit: CSU

CIS 151
**MICROSOFT EXCEL** 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides the skill and concepts needed to use the functions of the spreadsheet Microsoft EXCEL for Windows. 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. Hands-on exercises are used to reinforce the functions of EXCEL. This course is not open to students who have taken both CIS 54A (Formerly BCIS 11.1) and CIS 54B (Formerly BCIS 11.2). (Formerly BCIS 69.29/BCIS 11)
Transfer Credit: CSU

CIS 155
**MICROSOFT ACCESS** 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 102 or equivalent with a grade of Credit or "C" or higher.
This is a course in microcomputer database management using Microsoft Access. It covers relational database design, techniques for building a database using queries, forms, reports, and expressions. Topics also include multiple-table queries and reports and the user interface to a database. (Formerly BCIS 69.25/BCIS 14)
Transfer Credit: CSU

CIS 170
**PROGRAMMING IN BASIC** 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 101 or CIS 102 or equivalent with a grade of Credit or "C" or higher.
This is an introductory course in programming microcomputers for business applications. Using Microsoft BASIC, students will develop the skills necessary to convert appropriate information processing requirements into workable computer programs. Discipline, structure and modularity will be stressed throughout the course. Students will learn how to follow a task from problem definition through the successful implementation of a computer program. Business applications will provide the framework upon which programming skills will be
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CIS 171
VISUAL BASIC PROGRAMMING  3 UNITS
Class hours:3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 105 and CIS 170 or equivalent with grades of Credit or “C” or higher.
This is a course in designing and programming of the MS-Windows graphical user interface. Topics include standard interface design, event processing and control focus, data exchange, debugging and error handling. (Formerly BCIS 84/CIS 179)
Transfer Credit:CSU;UC

CIS 175
RPG PROGRAMMING  3 UNITS
Class hours:3 lecture/2 lab
Prerequisite: CIS 103 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
This is a basic course in applying the principles of data processing to standard business applications. The Report Program Generator language will be used, with emphasis on report preparation and file organization. The class introduces the student to CODE/400, a client-server pc-based application development environment; Operations Navigator, a graphical user interface used to create, change and maintain iSeries/400 objects; and also to the Integrated Language Environment (ILE). (Formerly BCIS 57)
Transfer Credit:CSU

CIS 177
PROGRAMMING IN PASCAL  4 UNITS
Class hours: 3lecture/3lab
Prerequisite: MATH 80 or equivalent with a grade of Credit or “C” or higher and satisfactory score on the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This is an introductory level computer programming course using the Pascal language. Topics include design of computer programs, data types, input and output, program control, structured data types, files, debugging techniques, functions, procedures, and data structures. (Formerly CPSC 87)
Transfer Credit:CSU;UC

CIS 178
PROGRAMMING IN FORTRAN  3 UNITS
Class hours:2 lecture/3lab
Prerequisite: MATH 140 or equivalent with a grade of Credit or “C” or higher and satisfactory score on the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This is an introductory level programming course using the Fortran programming language. Emphasis is placed on engineering and mathematics applications. Topics include input/output techniques, declaration statements, data types, branching, looping, arrays, subroutines, functions, passing parameters, sorting and searching. (Formerly CPSC 80)
Transfer Credit:CSU;UC

CIS 180
PROGRAMMING IN C/ C++  3 UNITS
Class hours:3 lecture/2 lab
Prerequisite: CIS 103 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
This course introduces C and C++ programming language structures. Topics include data types, operators, program control flow, arrays, functions, pointers, character strings, structures and pointers. This course also includes an introduction to object-oriented programming design. (This course is not open to students who have taken BCIS 95.) (Formerly BCIS 83)
Transfer Credit:CSU;UC

CIS 182
JAVA PROGRAMMING  3.5 UNITS
Class hours:3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Strongly recommend CIS 180 or equivalent with a grade of Credit or “C” or higher.
This course covers the fundamentals of the Java programming language used to develop internet, intranet, and World Wide Web applications. Features of Java programming covered in this course include basic Java programming constructs, object-oriented programming, and graphical user interface. (Formerly BCIS 92)
Transfer Credit:CSU

CIS 195
BUSINESS DATA COMMUNICATIONS SYSTEMS  3 UNITS
Class hours:3 lecture
Prerequisite: CIS 101 or CIS 102 or equivalent with a grade of Credit or “C” or higher.
This is an introductory course in data communications and distributed data processing. The course will include discussion on such subjects as types of communication links, data communication codes used in business, data transmission, business uses of multiplexing and concentrators, intelligent data networks and intelligent terminals, system configurations designed for business, and business uses of satellite communications. (Formerly BCIS 81)
Transfer Credit:CSU

CIS 201
SYSTEMS ANALYSIS AND DESIGN  3 UNITS
Class hours:3 lecture +1 hr. lab. arr.
Prerequisite: None.
This course is a detailed study of business data processing systems analysis and design theory and application techniques including: interviewing techniques, systems functions, surveys, flowcharting, analysis, and design. Attention is given to the role of the analyst within the business environment. (Formerly BCIS 61)
Transfer Credit:CSU

CIS 205
PROGRAMMING IN HTML FOR THE WORLD WIDE WEB  1.5 UNITS
Class hours:3 lecture/2 lab  (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 103 or CIS 121 or equivalent with a grade of Credit or “C” or higher.

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This course covers the fundamentals of the HTML (Hypertext Markup Language) language used to construct pages and documents on the World Wide Web. Features of HTML covered in this course include basic page structure, formatting, linking, handling images, handling color, tables, frames, forms, external media, plug-ins, linked windows, dynamic documents, and image maps. (Formerly BCIS 97.1/BCIS 75) Transfer Credit: CSU

CIS 207
SQL PROGRAMMING  3 UNITS
Class hours: 3 lecture +1 hr. lab. arr.
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course covers the concepts of designing, creating, and accessing Relational Database Management Systems using Structured Query Language (SQL). The database programming is based on Microsoft SQL. (Formerly BCIS 36) Transfer Credit: CSU

CIS 210
LOCAL AREA NETWORKS  3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 105 or equivalent with a grade of Credit or “C” or higher.
This course covers the concepts of designing, creating, and accessing Relational Database Management Systems using Structured Query Language (SQL). The database programming is based on Microsoft SQL. The course is intended for those who administer Microsoft Windows NT Server and Windows NT Workstation. This course is compliant with current industry certification. (Formerly BCIS 78.1)

CIS 212
MICROSOFT WINDOWS NT - PART 2  1.5 UNITS
Class hours: 3 lecture/2 lab (9 weeks)
Prerequisite: CIS 212A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course provides students with the knowledge and skills necessary to perform post-installation and day-to-day Microsoft NT administrative tasks in single-domain and multiple-domain networks. In addition, it provides students the background to prepare them for the technical support of NT workstations and servers. This course incorporates a hands-on approach to learning the material. This course is intended for those who administer Microsoft Windows NT Server and Windows NT Workstation. This course is compliant with concurrent industry certification. (Formerly BCIS 78.2)

CIS 214
UNIX  3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Knowledge of one operating system.
This course is a comprehensive study of the UNIX operating system and its administration. Topics include UNIX commands, file manipulation and maintenance, user management, shell programming, configurations, back-up, security, and networking. (Formerly BCIS 78) Transfer Credit: CSU

CIS 212A
MICROSOFT WINDOWS NT - PART 1  1.5 UNITS
Class hours: 3 lecture/2 lab (9 weeks)
Prerequisite: CIS 56 and CIS 105 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course provides students with the knowledge and skills necessary to perform post-installation and day-to-day Microsoft NT administrative tasks in single-domain and multiple-domain networks. In addition, it provides students the background to prepare them for the technical support of NT workstations and servers. This course incorporates a hands-on approach to learning the material. This course is intended for those who administer Microsoft Windows NT Server and Windows NT Workstation. This course is compliant with current industry certification. (Formerly BCIS 78.1)

CIS 220
WINDOWS PROGRAMMING  3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Strongly recommend CIS 180 or equivalent with a grade of Credit or “C” or higher.
This course covers the development of basic windows operations using Windows development tools and object-oriented languages. Topics include keyboard/mouse input, system timer, memory management, graphics interface, database exchange, and message model. (Formerly BCIS 89) Transfer Credit: CSU

CIS 221
ADVANCED VISUAL BASIC  3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 171 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course 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. The course uses ILE (Integrated Language Environment) RPG IV version. The topics covered include: interactive application development, use of display files, interactive file maintenance, file structure, Screen Design Aid (SDA), Common User Access (CUA), advanced file handling, subfiles, field and character manipulation, modular program, modular program design, multiple program design applications, and interprogram interface.

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communications. The class provides hands-on programming on the IBM AS/400 computer. This course is not open to students who have credit in BCIS 97.2. (Formerly BCIS 67)
Transfer Credit:CSU

CIS 224
ADVANCED COBOL PROGRAMMING 3 UNITS
Class hours:3 lecture +1 hr. lab. arr.
Prerequisite: CIS 176 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
This course is designed to extend both the students' skills in computer programming and their knowledge of the most frequently used language in business data processing. The emphasis will be on file processing and the advanced features of a high level implementation of COBOL including: COBOL Sort, Report Writer, Subroutine and Subprogram Linkage, COBOL Library, etc. (Formerly BCIS 71)
Transfer Credit:CSU;UC

CIS 230
ASSEMBLY PROGRAMMING FOR MICROCOMPUTERS 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: CIS 177 (Pascal) and CIS 180 ("C" Language), or CIS 178 (Fortran) or equivalent with grades of Credit or "C" or higher.
This course is a detailed coverage of microcomputer architecture and instruction sets and how to use them to design and write assembly language programs. Topics will cover principles of assembly programming including functions, stacks, recursion, macros, input/output devices, precision arithmetic and logic design. (Formerly CPSC 82)
Transfer Credit:CSU;UC

CIS 240
AS/400 CONTROL LANGUAGE PROGRAMMING 3 UNITS
Class hours:3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation:CIS 141 or equivalent with a grade of Credit or "C" or higher is strongly recommended.
This course covers the fundamental concepts required to develop control language programs for use on an IBM AS/400. Topics include: structured programming, program control, error handling, OS/400 concepts, and when to use CL programs. (Formerly BCIS 66)
Transfer Credit:CSU

CIS 251
ADVANCED SYSTEMS ANALYSIS AND DESIGN 3 UNITS
Class hours:3 lecture +1 hr. lab. arr.
Prerequisite: CIS 201 or equivalent with a grade of Credit or "C" or higher.
This course is a study of theory and application of business data processing systems including the use of administrative tools and techniques. Emphasis is placed on planning practical computer information systems for information retrieval, business applications, operations research, and management control. (Formerly BCIS 62)
Transfer Credit:CSU

CIS 253
CLIENT/ SERVER DEVELOPMENT WITH POWERBUILDER 3 UNITS
Class hours:3 lecture/2 lab
Prerequisite:CIS 171 or CIS 180 and CIS 105 or equivalent with grades of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This is a course in building client/server applications combining a windows-based graphical-user interface and a relational database using PowerBuilder. The students will learn the client/server development methodology and techniques, create applications and forms, and access data in relational databases. (Formerly BCIS 86)
Transfer Credit:CSU

CIS 271
COMPUTER AND INFORMATION SCIENCES OCCUPATIONAL WORK EXPERIENCE 1 UNIT
Class hours:1 hr/wk coordination class
Prerequisite: None.
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. 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.
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. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First-semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Second-, third-, and fourth-semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This may be taken for a maximum of 6 units. (Formerly BCIS 72/CIS 172)
Transfer Credit:CSU

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The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers.

First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site.

Second, third, and fourth semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. These courses may be taken for a maximum of 15-16 units. ( Formerly BCIS 73/74)

Transfer Credit:CSU

CIS 274
COMPUTER AND INFORMATION SCIENCES OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours:1 hour/week coordination class.
Corequisite: Enrollment in 7 or more units, including Computer and Information Sciences Occupational Work Experience, or at least one other course during summer, in a computer-related major. Four units of Computer and Information Sciences Occupational Work Experience require 240 non-paid hours of work or 300 paid hours of work per semester.

Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site.

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hair styling, hair coloring, permanent waving, chemical straightening, scalp treatments, facials, waxing, manicuring, pedicures, and thermal styling. This course may be taken for a maximum of 4 units. (Formerly COS 50)

**COS 50**
**INTRODUCTORY COSMETOLOGY I** 9.5 UNITS
Class hours: 9.75 lecture/29.25 lab
Prerequisite: None.
Limitation on enrollment: Completion of 10th grade or equivalent.
Corequisite: None.
Recommendation: None.
This is an introductory course in the technical and related theory and manipulative skills pertaining to the field of cosmetology. It is designed to acquaint the students with and to develop their ability to perform the basic skills in hairstyling, hair sculpturing, haircoloring, permanent waving, manicuring, facials, and people skills. Emphasis will be placed on the Cosmetology Act, State Board Rules and Regulations, safety, sanitation, anatomy, and chemistry as it relates to the cosmetology profession. (Formerly COS 12)

**COS 51**
**INTERMEDIATE COSMETOLOGY** 19.5 UNITS
Class hours: 9.75 lecture/29.25 lab
Prerequisite: COS 50 or equivalent with a grade of Credit or “C” or higher.
This is an intermediate course in theory as it pertains to cosmetology. It provides an opportunity for the student to continue developing manipulative skills in thermal hairstyling, wet hairstyling, chemical waving, hair sculpturing, salesmanship, long hairstyling, chemical relaxing, makeup, conditioning, manicuring, and to gain a knowledge of trichology, dermatology, and chemistry, as they relate to cosmetology. Haircoloring, hair design, and men’s hairstyling will also be studied. Emphasis is placed on professionalism and client relationships. (Formerly COS 22)

**COS 52**
**ADVANCED COSMETOLOGY** 19.5 UNITS
Class hours: 9.75 lecture/29.25 lab
Prerequisite: COS 51 or equivalent with a grade of Credit or “C” or higher.
This is an advanced course in theory as it pertains to cosmetology. It provides an opportunity for the student to continue developing manipulative skills in haircoloring, thermal hairstyling, competition styling, hair sculpturing, conditioning, reconstruction, chemical waving, chemical straightening, facials, makeup, and manicuring. Emphasis is placed on professionalism, client relationships and State Board examination preparation. (Formerly COS 32)

**COS 53**
**ADVANCED COSMETOLOGY MANIPULATION** 9 UNITS
Class hours: 9.75 lecture/29.25 lab (9 weeks)
Prerequisite: COS 52 or equivalent with a grade of Credit or “C” or higher.
This is an advanced course designed to permit the student to complete 1600 hours necessary to take the State Board of Cosmetology examination. It provides an opportunity for the student to continue developing manipulative skills in hairstyling, haircoloring, permanent waving, chemical straightening, scalp treatments, facials, waxing, manicuring, pedicuring, and thermal styling. This course may be repeated for a maximum of 18 units as necessary to complete 1600 hours. (Formerly COS 34.1)

**COS 54**
**INTRODUCTORY ESTHETICIAN** 10 UNITS
Class hours: 5 lecture/15 lab
Prerequisite: Limitation on enrollment: Completion of 10th grade or equivalent.
Corequisite: None.
This is an introductory course designed to develop basic skills and theoretical knowledge necessary to enter the licensed esthetician vocation. Students develop knowledge in theories of cosmetic chemistry, products, and their use and effect on skin. Students' knowledge and ability are achieved in a minimum of 300 hours, through lecture, demonstrations and laboratory in a salon atmosphere. (Formerly COS 96.01/COS 83)

**COS 54A**
**ADVANCED ESTHETICIAN** 10 UNITS
Class hours: 5 lecture/15 lab
Prerequisite: COS 54 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This class is an advanced portion of the esthetic program. It develops skills in electrical modalities, depilatory waxing, paraffin waxing, advanced massage techniques, and corrective make-up. Students develop skills in selecting appropriate facial treatments. The student's ability and knowledge are to be achieved in a minimum of 300 hours through lecture and demonstration by working in a salon atmosphere. (Formerly COS 96.02/COS 84)

**COS 60A**
**INTRODUCTORY COSMETOLOGY I** 10 UNITS
Class hours: 5 lecture/15 lab
Limitation on enrollment: 10th grade education or equivalent.
This is an introductory course in the technical and related theory and manipulative skills pertaining to the field of cosmetology. It is designed to acquaint the student with, and to develop their ability to perform the basic skills in hairstyling, hair sculpturing, haircoloring, permanent waving, and manicuring. Emphasis will be placed on the Cosmetology Act, State Board Rules and Regulations, safety, sanitation, anatomy, and chemistry as they relate to the cosmetology profession. (Formerly COS 41)

**COS 60B**
**INTRODUCTORY COSMETOLOGY II** 10 UNITS
Class hours: 5 lecture/15 lab
Prerequisite: COS 60A or equivalent with a grade of Credit or “C” or higher.
This is an introductory course in the technical and related theory and manipulative skills pertaining to the field of cosmetology. It provides an opportunity for the student to perform basic skills in chemical relaxer, soft perms, press and curl, facials and people skills. It provides an opportunity for the student to continue developing manipulative skill in hairstyling, hair sculpturing, haircoloring, permanent waving, manicuring, and pedicuring. Emphasis will be placed on the safety and sanitation as it relates to the cosmetology profession, professionalism and client relationships. (Formerly COS 42)

**COS 61A**
**INTERMEDIATE COSMETOLOGY I** 10 UNITS
Class hours: 5 lecture/15 lab
Prerequisite: COS 60B or equivalent with a grade of Credit or “C” or higher.
This is an intermediate course in theory as it pertains to cosmetology. It provides an opportunity for the student to continue developing manipulative skills in thermal hairstyling, wet hairstyling, chemical waving, hair sculpturing, salesmanship, long hairstyling, chemical relaxing, make-up, conditioning, manicuring, and to gain a 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. (Formerly COS 43)
COS 61B  
**INTERMEDIATE**  
**COSMETOLOGY II**  
**10 UNITS**  
Class hours: 5 lecture/15 lab  
Prerequisite: COS 61A or equivalent with a grade of Credit or “C” or higher.  
This is an intermediate course in theory as it pertains to cosmetology. It provides an opportunity for the student to continue developing manipulative skills in haircoloring, manicuring, scalp treatments, chemical waving, hairsculpturing, and chemistry, hairdesign, permanent wave, press and curl, and chemical relaxing. Emphasis is placed on professionalism, client relationships, and peopleskills. (Formerly COS 44)

COS 62A  
**ADVANCED**  
**COSMETOLOGY I**  
**10 UNITS**  
Class hours: 5 lecture/15 lab  
Prerequisite: COS 61B or equivalent with a grade of Credit or “C” or higher.  
This is an advanced course in theory as it pertains to cosmetology. It provides an opportunity for the student to continue developing manipulative skills in haircoloring, thermal hairstyling, competition styling, hairsculpturing, conditioning, reconstruction, chemical waving, chemical straightening, facials, make-up, and manicuring. Emphasis is placed on professionalism, client relationships and State Board examination preparation. (Formerly COS 46)

COS 70A  
**INTERMEDIATE**  
**COSMETOLOGY I**  
**8 UNITS**  
Class hours: 9.38 lecture/28.13 lab (8 weeks)  
Prerequisite: None.  
Limitation on enrollment: 10th grade education or equivalent.  
Corequisite: None.  
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. (Formerly COS 15.1)

COS 70B  
**INTERMEDIATE**  
**COSMETOLOGY II**  
**8 UNITS**  
Class hours: 9.38 lecture/28.13 lab (8 weeks)  
Prerequisite: COS 50 or equivalent with a grade of Credit or “C” or higher.  
This is an intermediate course in technical and related theory as it pertains to cosmetology. It provides an opportunity for the student to 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 and personal/client relationships. (Formerly COS 15.2)

COS 70C  
**ADVANCED**  
**COSMETOLOGY II**  
**8 UNITS**  
Class hours: 9.38 lecture/28.13 lab (8 weeks)  
Prerequisite: COS 51 or equivalent with a grade of Credit or “C” or higher.  
This is a course in theory as it pertains to cosmetology. It provides an opportunity for the student to continue developing manipulative skills in haircoloring, thermal hairstyling, competition styling, hairsculpturing, conditioning, reconstruction, chemical waving, chemical straightening, facials, make-up, and manicuring. Emphasis is placed on professionalism, client relationships and State Board examination preparation. This course may be taken for a maximum of 16 units as necessary to complete 1600 hours. (Formerly COS 15.3)

COS 71A  
**INTERMEDIATE**  
**COSMETOLOGY I**  
**4 UNITS**  
Class hours: 4.5 lecture/13.5 lab (8 weeks)  
Prerequisite: None.  
Limitation on enrollment: 10th grade education or equivalent.  
This is an introductory course in technical and related theory as it pertains to cosmetology. It provides an opportunity for the student to continue developing manipulative skills in haircoloring, thermal hairstyling, chemical waving, hairsculpturing, conditioning, reconstruction, chemical waving, chemical straightening, facials, make-up, and manicuring. Emphasis is placed on professionalism and personal/client relationships. (Formerly COS 23.1)

COS 71B  
**INTERMEDIATE**  
**COSMETOLOGY II**  
**4 UNITS**  
Class hours: 4.5 lecture/13.5 lab (8 weeks)  
Prerequisite: COS 60B or equivalent with a grade of Credit or “C” or higher.  
This is an intermediate course in technical and related theory as it pertains to cosmetology. It provides an opportunity for the student to continue developing manipulative skills in haircoloring, thermal hairstyling, chemical waving, chemical straightening, facials, make-up, and manicuring. Emphasis is placed on professionalism and personal/client relationships. (Formerly COS 23.2)

COS 71C  
**ADVANCED**  
**COSMETOLOGY II**  
**4 UNITS**  
Class hours: 4.5 lecture/13.5 lab (8 weeks)  
Prerequisite: COS 61B or equivalent with a grade of Credit or “C” or higher.  
This is a course in theory as it pertains to cosmetology. It provides an opportunity for the student to continue developing manipulative skills in haircoloring, thermal hairstyling, competition styling, hairsculpturing, conditioning, reconstruction, chemical waving, chemical straightening, facials, make-up, and manicuring. Emphasis is placed on professionalism and personal/client relationships and State Board examination preparation. This course may be taken for a maximum of 8 units as necessary to complete 1600 hours. (Formerly COS 23.3)
COUNSELING AND GUIDANCE
(Counseling Division)

CG 1 (Not degree applicable) CAREER PLANNING 1 UNIT
Class hours:2 hours per week (9 weeks)
Prerequisite: None.
This course is designed to help the student approach career decisions in a systematic way. A variety of techniques are used to assess individual characteristics and relate these to occupational information. At times, sections may be offered which emphasize particular types of situations such as the person making initial career decisions, mid-life career changes, and minority programs. (Formerly CG 2)

CG 2 (Not degree applicable) (Summer only) SELF AWARENESS TOWARDS EDUCATIONAL READINESS 2 UNITS
Class hours:6 lecture/10 lab (6 weeks)
Prerequisite: None.
This course is designed to aid the student in identifying and evaluating individual, educational, and vocational ability. Self-awareness techniques will be used to enhance this assessment process. This class is designed primarily for the EOPS summer students, but is open to all interested students. Field work experience will assist the student to develop skills that enhance his/her work performance. (Ten hours field work for those employed as work study or equivalent volunteer experience as approved by instructor. This course may be taken for a maximum of 4 units. (Formerly CG 4)

CG 3 (Not degree applicable) ORIENTATION FOR THE STUDENT WITH DISABILITIES 1 UNIT
Class hours:2 lecture (9 weeks)
Prerequisite: None.
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 7)

CG 4 (Not degree applicable) CAREER EXPLORATION FOR THE STUDENT WITH DISABILITIES 1 UNIT
Class hours:2 lecture (9 weeks)
Prerequisite: None.
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 8)

CG 5 (Not degree applicable) PERSONAL ASSESSMENT FOR THE STUDENT WITH DISABILITIES 1 UNIT
Class hours:2 lecture (9 weeks)
Prerequisite: CG 3 or equivalent with a grade of Credit 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 9)

CG 6 (Not degree applicable) FAMILY LIVING FOR THE STUDENT WITH DISABILITIES 1 UNIT
Class hours:2 lecture (9 weeks)
Prerequisite: None.
This class is designed to explore the various aspects of family life from the viewpoint of the disabled person. An Individual Educational Plan (IEP)/learning contract will be developed for each student who enrolls in this course. Sexuality, marriage and parenting will be addressed. This course may be taken for a maximum of 4 units. (Formerly CG 11)

CG 50 ORIENTATION AND EDUCATIONAL PLANNING 0.5 UNITS
Class hours:1.5 lecture (6 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to introduce students to: Services offered at Cerritos College; the history and mission of the college; the history and mission of the system of post-secondary education 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. (Formerly CG 3)

CG 100 COUNSELOR AIDE IN THE COMMUNITY COLLEGE 2 UNITS
Class hours:2 lecture
Prerequisite: None.
This course is designed to familiarize the student with the functions and training in the techniques of the student counselor aide in a community college setting. (Formerly CG 10)
Transfer Credit:CSU

CG 200 SUCCESS IN COLLEGE AND CAREER 3 UNITS
Class hours:3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will provide students with knowledge, information, and skills to better understand themselves as students, people, and members of the working world. It will assist them to establish life, career, educational, and personal goals and to develop plans and strategies to successfully meet those goals. (Formerly CG 20)
Transfer Credit:CSU

CG 210 JOB SEARCH STRATEGIES 1 UNIT
Class hours:2 lecture/1 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: Completion or near completion of a degree program or certificate program or be actively seeking a new employment opportunity.
This is an open entry/open exit, self-paced course designed to prepare students to manage their transition from college-to-work and/or work-to-work situations. Students will learn the fundamentals of the job search process. Students will learn to develop job search strategies, prepare print and electronic resumes and improve their interview skills. This course is offered on a credit/no credit basis only. This course may be taken for a maximum of 2 units. (Formerly CG 21)
Transfer Credit:CSU

COURT REPORTING SEE BUSC
(Business Court Reporting/Computerized Shorthand)

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
CULINARY ARTS
(Health Occupations Division)

CA 15
CERTIFICATION FOR FOOD HANDLERS 0.5 UNIT
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
This course covers the principles of food handling. It is a National Restaurant
Association ServSafe course and meets current requirements established by regulatory
agencies for a certified food handler. This course is offered on a credit/no credit basis only. (Formerly CA 1.5)

CA 43/44 (Not degree applicable)
OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for
Culinary Arts work experience 43 or 20 hours of employment per week for Culinary
Arts work experience 44. The employment must be in a job related to the student’s
educational goal.
Prerequisite: None.
Corequisite: (1) Enrollment in the Culinary Arts vocational program with 7 or more units
including occupational work experience.
Occupational Work Experience is a supervised employment program in an approved
work station related to the student’s declared major. Students meet with their instructor for
a minimum of one hour per week and will receive credit for on-the-job learning experiences
that are new or are an expansion of their regular responsibilities. This course may be repeated for a maximum of 8 units
based on the number of hours on the job. (Formerly CA 73/74)

CA 50
DINING ROOM SERVICE 2 UNITS
Class hours: 3 lecture/4 lab (9 weeks)
Prerequisite: A tuberculosis test, within the last six months, validating absence of infection.
Corequisite: None.
This course introduces the student to professional waiter/waitress service. The student will
develop basic skills utilized in all areas in front of the house restaurant operations including
service, guest relations, classic styles, and etiquette. (Formerly CA 5)

CA 50A
DINING ROOM MANAGEMENT 2 UNITS
Class hours: 3 lecture/4 lab (9 weeks)
Prerequisite: CA 50 or equivalent with a grade of Credit or “C” or higher. A tuberculosis test,
within the last six months, validating absence of infection.
Corequisite: None.
Recommendation: CA 15 or CA 101 or equivalent with a grade of Credit or “C” or higher.
This course continues the students’ training to professional dining room management level. The student will develop further guest
relations skills in a real restaurant setting. Extensive knowledge of bar and beverage service and cash handling will be empha-
sized. (Formerly CA 5.1)

CA 52
FOOD PRODUCTION 9.5 UNITS
Class hours: 3 lecture/20 lab
Prerequisite: CA 101 or equivalent with a grade of Credit or “C” or higher or concurrent enrollment.
This course introduces the beginning student to food products and ingredients and
develops basic cooking skills used in commercial kitchens. An introduction to
dining room service is also included. The preparation and uses of meats, vegetables,
fruits, salads, sandwiches, garnishes, dressing, grilling, deep-fat frying, pan frying,
and broiling are included. (Formerly CA 2)

CA 53
COMMERCIAL FOOD PRODUCTION: Pantry Items 9.5 UNITS
Class hours: 3 lecture/7 lab
Prerequisite: CA 52 and CA 101 or equivalent with grades of Credit or “C” or higher.
This is a basic course in fundamentals of hotel and restaurant dinner cooking and
methods of preparing special pantry items. Lecture/demonstrations and practical experience in varied methods of cooking
techniques are an essential part of this course. (Formerly CA 3)

CA 54
COMMERCIAL FOOD PRODUCTION: Meats & Poultry 9.5 UNITS
Class hours: 3 lecture/20 lab
Prerequisite: CA 53 or equivalent with a grade of Credit or “C” or higher.
This course is designed to familiarize the student with the principles and procedures of
hotel restaurant butchering, meat purchasing, and the carving of meats and
poultry. Includes lecture/demonstration and practical experience in carving procedures,
trimming, boning, rolling, tying, and cutting of steaks and chops. (Formerly CA 4)

CA 60
FOODS PURCHASE AND CONTROL 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed to familiarize the student with all aspects of purchasing and
cost control within the foodservice industry. Instruction and experience in the areas of forecasting operational needs, menu pricing,
food purchasing, and cost control are included. (Formerly CA 6)

CA 80
INTRODUCTION TO BAKING SKILLS 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: None.
Corequisite: CA 101 or equivalent with a grade of Credit or “C” or higher or concurrent enrollment.
This course introduces the student to basic baking techniques and basic ingredients
utilized in the industry. The course will cover developing a variety of breads, sweet doughs,
rolls, pies, and cookies. A negative T.B. test for food service personnel is a State regulation.
(Formerly CA 10)

CA 81
PROFESSIONAL BAKING AND PASTRY PRODUCTION I 5 UNITS
Class hours: 3 lecture/7 lab
Prerequisite: CA 80 and CA 101 or equivalent with grades of Credit or “C” or higher.
This course introduces the student to the baking industry, baked products, and ingredients. The
student will develop basic skills utilized in professional bakeries. Demonstration and prac-
tical 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. (Formerly CA 11)

CA 82
PROFESSIONAL BAKING AND PASTRY PRODUCTION II 5 UNITS
Class hours: 3 lecture/7 lab
Prerequisite: CA 81 or equivalent with a grade of Credit or “C” or higher.
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 cakes, pastries, icings, fillings, and specialty breads and rolls. Processed frozen dough, fried products, and frozen baked products are introduced. Maintaining product freshness is emphasized. A negative T.B. test for food service personnel is a State regulation. (Formerly CA 12)

CA 85
ADVANCED PROFESSIONAL
PASTRY DESIGN AND
DECORATING 3 UNITS
Class hours: 3 lecture
Prerequisite: CA 81 or equivalent with a grade of Credit or “C” or higher.
Corequisite: CA 82
This advanced professional baking course emphasizes different preparation and decorating techniques utilized in the baking industry. It includes formulation and mixing of icing materials and presentation of design. A negative T.B. test for food service personnel is a State regulation. (Formerly CA 13)

CA 101
INTRODUCTION TO
FOOD SERVICE,
SAFETY & SANITATION 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
This course covers the principles of food microbiology, important foodborne diseases, standards that are enforced by regulatory agencies, and applied measures for the prevention of foodborne diseases and other microbiological problems. This course meets current food protection standards for regulatory agencies. (Formerly CA 1)
Transfer Credit: CSU

CA 120
INTRODUCTION TO
HOSPITALITY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
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

DENTAL ASSISTING
(Health Occupations Division)

DA 1 (Not degree applicable)
DENTAL RADIATION
SAFETY LICENSING 1.5 UNITS
Class hours: 4 lecture/5 lab (6 weeks)
Prerequisite: Verification of a minimum of 480 hours of work experience as a dental assistant.
Corequisite: None.
Recommendation: None.
This course prepares the working dental assistant with theories and techniques of intra-oral and extra-oral radiography including application to a variety of patients. Upon satisfactory completion of this course, the student will receive a California Radiation License. This course may be taken for a maximum of 3 units. This course is offered on a credit/no credit basis only. (Formerly DA 40)

DA 51
APPLIED DENTAL SCIENCE I 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: Admission to the Dental Assisting Program.
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, and pouring models. It also includes procedures in managing asepsis, infection and hazard control consisting of maintenance, disinfection and sterilization of equipment, supplies, and disposal of hazardous waste pertaining to patient care.

DA 52
DENTAL RADIOGRAPHY I 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: Admission to the Dental Assisting Program.
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 UNITS
Class hours: 2 lecture, 3 lab
Prerequisite: Admission to the Dental Assisting Program.
Corequisite: DA 54.
This course involves instruction in the role and responsibilities of the chairside assistant. It includes basic qualifications, preparing patient for treatment, taking of a health history, charting terminology, positioning of patient-operator- auxiliary for four-handed dental procedures, assisting with administration of local anesthetic agents, placement of a rubber dam, instrument exchange, oral evacuation, retraction, illumination, and assisting with endodontic procedures. Cardiopulmonary resuscitation is included as part of the course content.

DA 54
INTRODUCTION TO OPERATORY PROCEDURES 4 UNITS
Class hours: 2 lecture, 6 lab
Prerequisite: Admission to the Dental Assisting Program.
Corequisite: DA 53.
This course includes manikin instruction in the techniques, materials, and instrumentation for assisting in operative dental procedures such as amalgam and composite restorations, gold inlays and crowns, and fixed bridges. An introduction to intra-oral tasks delegated to registered dental assistants which are related to operative dentistry, such as matrix placement, placement of bases and liners, placement of plastic temporary restorations, and removal of excess cement is also provided.

DA 61
APPLIED DENTAL SCIENCE II 3 UNITS
Class hours: 2 lecture, 3 lab
Prerequisite: DA 51 or equivalent with a grade of Credit or “C” or higher.
Corequisite: DA 63.
This course includes a study of oral pathology, nitrous oxide, pharmacology and the influences of dental medicines on the body systems. Post-injection complications and medical emergencies are included. Emphasis is also placed on preventive dentistry with instruction in four preventive measures: use of fluorides, regular dental examinations, daily practice of effective oral hygiene, good nutrition, and control of food...
habits. Instruction and supervision of a plaque control program will be achieved through clinical experience with focus on the identification of calculus, plaque, and stains, applying disclosing agents, and polishing exposed surfaces of the teeth. The student will also develop and implement a community dental health project.

DA 62
DENTAL RADIOGRAPHY II 2 UNITS
Class hours:1 lecture,3 lab
Prerequisite: DA 52 or equivalent with a grade of Credit or “C” or higher.

The student will be instructed in advance techniques of dental radiography, anatomical landmarks and dental anatomy pertaining to dental radiography with emphasis placed on evaluation of films. The student will practice taking full mouth radiographs for diagnosis by a dentist. Operation of panoramic equipment will also be included.

DA 63
ADVANCED CHAIRSIDE ASSISTING 4 UNITS
Class hours:2 lecture,6 lab
Prerequisite: DA 53 and DA 54 or equivalent with grades of Credit or “C” or higher.
Corequisite: DA 65.

This course includes instruction in the specialties of dentistry and armamentarium required in each specialty. Laboratory content includes development of preclinical skills in the extended functions which are required for the Registered Dental Assistant.

DA 64
DENTAL OFFICE MANAGEMENT 2 UNITS
Class hours:1 lecture,3 lab
Prerequisite: DA 51 or equivalent with a grade of Credit or “C” or higher.

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 UNITS
Class hours:1 lecture,7 lab
Prerequisite: DA 53, DA 54 or equivalent with grades of Credit 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 UNITS
Class hours: Lecture total semester hours 20, lab total semester hours 192
Prerequisite: DA 65 or equivalent with a grade of Credit 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 UNITS
Class hours:2 lecture
Prerequisite: Admission to the Dental Hygiene Program. A valid adult, child and infant CPR card including two-person CPR.
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. (Formerly DH 10)
Transfer Credit:CSU

DH 111
INFECTION CONTROL AND DENTAL OFFICE EMERGENCIES 2 UNITS
Class hours:2 lecture
Prerequisite: Acceptance into Dental Hygiene Program.
Corequisite: DH 115C.
This course covers the basic principles of infection control and the application of “universal precautions” in the dental health care setting. Included in this course is the selection and use of procedures and products to prevent the spread of infectious diseases in the practice of dental hygiene. Specific step-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. (Formerly DH 11)
Transfer Credit:CSU

DH 112
DENTAL HYGIENE RADIOGRAPHY 2 UNITS
Class hours:1 lecture/3 lab
Prerequisite: Admission to the Dental Hygiene Program
Corequisite: DH 116 and DH 119
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 for preliminary evaluation and the use of photographic equipment for case study. It includes the theories and techniques of intra-oral and extra-oral radiography with laboratory experience and analysis of technique errors. (Formerly DH 12)
Transfer Credit:CSU

DH 114
DENTAL HYGIENE CLINICAL SCIENCES I 2 UNITS
Class hours:2 lecture
Prerequisite: Admission to the Dental Hygiene Program.
Corequisite: DH 115C.
This course introduces the student to the methodology and rationale for patient assessment and data collection. It includes patient histories, determination of vital signs, extraoral and intraoral examination, examination of the gingival and periodontal tissues, examination of the teeth and appropriate documentation of the data. The
student will receive essential information for assessment of a patient prior to the formulation of the dental hygiene treatment service plan. (Formerly DH 14)
Transfer Credit: CSU

DH 115C
PRE-CLINICAL
DENTAL HYGIENE I 2 UNITS
Class hours: 6 lab
Prerequisite: Admission to the Dental Hygiene Program.
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. (Formerly DH 15)
Transfer Credit: CSU

DH 116
HEAD AND NECK ANATOMY 2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: Admission to the Dental Hygiene Program.
Corequisite: DH 119.
This course is a detailed study of the anatomy and physiology of the human head and neck. Emphasis is placed on the correlation of structure and function especially where applicable to clinical dental hygiene. (Formerly DH 16)

DH 119
DENTAL EMBRYOLOGY, HISTOLOGY, AND ANATOMY 2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: Admission to the Dental Hygiene Program.
Corequisite: DH 115C and DH 116.
Recommendation: None.
This course covers an introduction to orofacial structures and the study of orofacial embryology, oral histology, and dental anatomy. Clinical considerations relevant to dental hygiene practice and root morphology to enhance instrumentation are included. (Formerly DH 19)
Transfer Credit: CSU

DH 120
PREVENTIVE DENTISTRY II 2 UNITS
Class hours: 2 lecture
Prerequisite: DH 114 and HO 152 or equivalent with grades of Credit or “C” or higher.
Corequisite: DH 125C.
Recommendation: DH 110 or equivalent with a grade of Credit or “C” or higher.
This course offers clinical information in the areas of patient motivation for plaque control, including periodontal disease, and dietary analysis. Techniques in nutritional counseling for the dental patient will be emphasized. (Formerly DH 20)
Transfer Credit: CSU

DH 125
DENTAL HYGIENE CLINICAL SCIENCES II 2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: DH 114 and DH 115C or equivalent with a grade of Credit or “C” or higher.
Corequisite: DH 125C.
This course is designed to support Clinical Dental Hygiene I. It is extended to allow for weekly discussions pertinent to clinical skills and related subjects which can be applied in the dental clinic setting. An overview of the technique and procedures particular to each dental specialty is presented. Dental clinic policies and procedures for clinic operation will be emphasized. (Formerly DH 25.1)
Transfer Credit: CSU

DH 125C
CLINICAL DENTAL HYGIENE II 3 UNITS
Class hours: 9 lab/clinic
Prerequisite: DH 115C or equivalent with a grade of Credit or “C” or higher.
Corequisite: DH 125.
This course provides the student with clinical experiences in the practical application of dental procedures to perform comprehensive oral hygiene services. Students are scheduled at off campus dental clinics with supervision from the Cerritos College Dental Hygiene Faculty and will have the opportunity to observe the various dental specialties at the UCLA School of Dentistry. (Formerly DH 25)
Transfer Credit: CSU

DH 126
GENERAL AND ORAL PATHOLOGY 2 UNITS
Class hours: 3 lecture/lab
Prerequisite: DH 112, DH 116 and DH 119 or equivalent with grades of Credit or “C” or higher.
Corequisite: DH 125C.
This course includes an in-depth study of the principles of general pathology and the specifics of oral pathology. Emphasis is placed on the clinical recognition, differential diagnosis, and treatment of oral pathologic conditions and associated systemic disorders. (Formerly DH 26)
Transfer Credit: CSU

DH 127
PHARMACOLOGY 2 UNITS
Class hours: 2 lecture
Prerequisite: DH 115C, DH 116, and DH 119 or equivalent with grades of Credit or “C” or higher.
Corequisite: DH 125C, DH 126, and DH 128.
This course covers the general principles of pharmacology, use of therapeutic agents utilized in dental practice, an overview of medically prescribed drugs used by dental patients and a background of contemporary pharmacologic issues which concern the consumer. (Formerly DH 27)
Transfer Credit: CSU

DH 128
MANAGEMENT OF PAIN 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: DH 116 or equivalent with a grade of Credit or “C” or higher, and current certification in CPR.
Corequisite: DH 125C and DH 127.
This course is designed to teach the student management of pain control through the use of local anesthetic agents and the administration of nitrous oxide and oxygen when used as a sedative. The physiology and pharmacology agents, indications and contra-indications for use, and the treatment of complications and emergencies are stressed. Other modalities of pain control will be discussed. (Formerly DH 28)
Transfer Credit: CSU

DH 129
APPLIED PERIODONTICS 2 UNITS
Class hours: 2 lecture
Prerequisite: DH 114 or equivalent with a grade of Credit or “C” or higher.
Corequisite: DH 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. (Formerly DH 29)
Transfer Credit: CSU

DH 150
CLINICAL DENTAL HYGIENE IIA 1 UNIT
Class hours: 3 lab
Prerequisite: DH 125C or equivalent with a grade of Credit or “C” or higher.
This course provides the student with clinical experiences in the delivery of dental services

Announcement of Courses

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
on patients, utilizing instructor assisted guided discovery learning methodology. Students are scheduled at select contract dental facilities. (Formerly DH 25.2)
Transfer Credit: CSU

DH 232
DENTAL MATERIALS LABORATORY 1 UNIT
Class hours: 3 lab
Prerequisite: None.
Corequisite: DH 245C.
This course emphasizes the reasons specific dental materials are employed and the ways in which they react to the oral environment. Biological considerations in the selection and utilization of various dental materials are stressed. The course is designed to provide the dental hygiene student with an understanding of laboratory techniques and chairside procedures commonly encountered in dentistry. (Formerly DH 32)
Transfer Credit: CSU

DH 234
DENTAL CARE FOR THE SPECIAL PATIENT 2 UNITS
Class hours: 2 lecture
Prerequisite: DH 125C and DH 127 or equivalent with grades of Credit or "C" or higher.
Corequisite: DH 235C.
This introductory course for dental hygiene care of the medically compromised and older adult patient covers basic information on disease entities which cause disabilities and are common in the older person. Emphasis will be on recognition of medical precautions, medications which affect oral health, barriers and access to oral health care, and prevention and treatment of oral diseases. (Formerly DH 34)
Transfer Credit: CSU

DH 235
DENTAL HYGIENE CLINICAL SCIENCES III 2 UNITS
Class hours: 2 lecture
Prerequisite: DH 125C or equivalent with a grade of Credit or "C" or higher.
Corequisite: DH 235C.
This course is designed to support Clinical Dental Hygiene III. It is intended to allow for further studies in advanced periodontal treatment. (Formerly DH 35.1)
Transfer Credit: CSU

DH 235C
CLINICAL DENTAL HYGIENE III 4 UNITS
Class hours: 12 lab/clinic
Prerequisite: DH 125C or equivalent with a grade of Credit or "C" or higher.
Corequisite: DH 235.
This course is designed to provide the student with the continuation of clinical experiences in performing comprehensive dental hygiene services. Students are scheduled at the UCLA Dental Clinic and selected Los Angeles County dental facilities. Under the supervision of the Cerritos College Dental Hygiene faculty, the student will perform traditional dental hygiene functions increasing in complexity through the sequence of clinical courses. (Formerly DH 35)
Transfer Credit: CSU

DH 238
COMMUNITY DENTAL HEALTH LABORATORY I 1 UNIT
Class hours: 3 lab
Prerequisite: DH 110 or equivalent with a grade of Credit or "C" or higher.
This course is designed to provide the student with an opportunity to deliver dental health education to children in the community. Students will be assigned to elementary school classrooms and will prepare lesson plans, behavioral objectives, and plan of evaluation, to be used in presenting subject matter to the children. (Formerly DH 38)
Transfer Credit: CSU

DH 239
DENTAL HEALTH EDUCATION AND RESEARCH I 2 UNITS
Class hours: 2 lecture
Prerequisite: DH 110 or equivalent with a grade of Credit or "C" or higher.
Corequisite: DH 120 and DH 238.
This course provides a basic introduction to the principles of health education and research. Emphasis will be placed on the teaching/learning process, pedagogy effective with a diverse population of elementary school children, and research methodology for the development of a scientific poster session suitable for presentation in the dental community. (Formerly DH 39)
Transfer Credit: CSU

DH 244
ETHICAL ISSUES IN DENTAL HYGIENE 2 UNITS
Class hours: 2 lecture
Prerequisite: DH 235C or equivalent with a grade of Credit or "C" or higher.
Corequisite: DH 245C.
This course investigates ethical issues, dilemmas, and the State Dental Practice Act that affect the standards of behavior for the dental hygienist. Principles of general and biomedical ethics are applied to common examples of situations faced by dentists and hygienists in today's dental practice. (Formerly DH 44)
Transfer Credit: CSU

DH 245
DENTAL HYGIENE CLINICAL SCIENCES IV 2 UNITS
Class hours: 2 lecture
Prerequisite: DH 235C or equivalent with a grade of Credit or "C" or higher.
Corequisite: DH 245C.
This course is designed to support Clinical Dental Hygiene IV and prepare the students for the National Board Dental Hygiene Examination. Current dental treatment philosophies and technological advances in dentistry are presented through case-based problem simulations. In addition, the subject of myofunctional evaluation and therapeutic treatment modalities will be introduced. (Formerly DH 45.1)
Transfer Credit: CSU

DH 245C
CLINICAL DENTAL HYGIENE IV 4 UNITS
Class hours: 12 lab/clinic
Prerequisite: DH 235C or equivalent with a grade of Credit or "C" or higher.
Corequisite: DH 245
This course is designed to provide the student with the continuation of clinical experiences in performing comprehensive dental hygiene services to patients with complex periodontal problems. Increased opportunities are experienced at multicultural and 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. (Formerly DH 45)
Transfer Credit: CSU

DH 248
COMMUNITY DENTAL HEALTH LABORATORY 1 UNIT
Class hours: 3 lab
Prerequisite: DH 238 and DH 239 or equivalent with grades of Credit or "C" or higher.
Corequisite: DH 249.
This course is designed to provide the student with an opportunity to deliver dental health education to a variety of age groups in the community. Emphasis will be on student knowledge and initiative in the design, implementation, and evaluation of a dental health program of his/her choice for an adult...
group in the community. Additionally, table clinics on a current dental topic of interest will be presented in the community. (Formerly DH 48)
Transfer Credit:CSU

DH 249
DENTAL HEALTH
EDUCATION AND RESEARCH II 2 UNITS
Class hours:2 lecture
Prerequisite: DH 239 or equivalent with a grade of Credit or "C" or higher.
Corequisite: DH 248L.
This course introduces basic concepts of dental public health including oral epidemiology, health care delivery and related research. Teaching/learning philosophies and strategies appropriate for dental health education of diverse adult populations are stressed. (Formerly DH 49)
Transfer Credit:CSU

DH 250
CLINICAL DENTAL HYGIENE V 1 UNIT
Class hours:3 lab
Prerequisite: DH 245C or equivalent with a grade of Credit or "C" or higher.
This course is designed to provide clinical experiences and class discussion in preparation for the California State Board Dental Hygiene Licensure Examination. Emphasis will be placed on utilization of State Board criteria to determine eligibility of acceptable patients. (Formerly DH 55)
Transfer Credit:CSU

DIRECTED STUDIES

Directed Studies in any combination may be taken for a maximum of 6 units

DS 98
DIRECTED STUDIES 1 UNIT
Class hours:3 lab
Prerequisite: A previous college course in the discipline.
A course to provide opportunity for individual research and field projects under the direction of a faculty member in a given department. With the guidance of the faculty member, students prepare and carry out a written learning agreement describing the purposes and outcomes of the project. Students should expect to meet with the supervising faculty member one to two hours each week for conferences. Credit is based upon the number of hours in the semester expected to complete the project (1 unit for 54 hours, 2 units for 108 hours).
Transfer Credit:CSU

DS 99
DIRECTED STUDIES 2 UNITS
Class hours:6 lab
Prerequisite: A previous college course in the discipline.
A course to provide opportunity for individual research and field projects under the direction of a faculty member in a given department. With the guidance of the faculty member, students prepare and carry out a written learning agreement describing the purposes and outcomes of the project. Students should expect to meet with the supervising faculty member one to two hours each week for conferences. Credit is based upon the number of hours in the semester expected to complete the project (1 unit for 54 hours, 2 units for 108 hours).
Transfer Credit:CSU

DRAFTING
( Technology Division)

DRAF 16
BLUEPRINT READING FOR MACHINE TRADES 2 UNITS
Class hours:1.5 lecture, 1.5 lab
Prerequisite: None.
This course is a study of working drawings and blueprints used in manufacturing. Emphasis is placed on the ability to visualize and interpret typical drawings. Research is required into standards, specifications, procedures, bulletins, and techniques which are a parallel part of the shop drawing system. It is intended to prepare the student for accurate interpretation of drawings in order to carry out the applications required or use them as appropriate reference.

DRAF 298
DIRECTED STUDIES 1 UNIT
Class hours:3 lab
Prerequisite: A previous college course in the discipline.
A course to provide opportunity for individual research and field projects under the direction of a faculty member in a given department. With the guidance of the faculty member, students prepare and carry out a written learning agreement describing the purposes and outcomes of the project. Students should expect to meet with the supervising faculty member one to two hours each week for conferences. Credit is based upon the number of hours in the semester expected to complete the project (1 unit for 54 hours, 2 units for 108 hours).
Transfer Credit:CSU

DRAF 299
DIRECTED STUDIES 2 UNITS
Class hours:6 lab
Prerequisite: A previous college course in the discipline.
A course to provide opportunity for individual research and field projects under the direction of a faculty member in a given department. With the guidance of the faculty member, students prepare and carry out a written learning agreement describing the purposes and outcomes of the project. Students should expect to meet with the supervising faculty member one to two hours each week for conferences. Credit is based upon the number of hours in the semester expected to complete the project (1 unit for 54 hours, 2 units for 108 hours).
Transfer Credit:CSU

DRAF 31
FUNDAMENTALS OF DRAFTING INCLUDING AUTOCAD 3 UNITS
Class hours:2 lecture/4 lab
Prerequisite: None.
This course, for students who have had no high school mechanical drafting, stresses proper use of manual drafting instruments and computer aided design (CAD) using AutoCAD software for lettering text, geometric construction, isometric drawing, orthographic projection, dimensions, single auxiliary views, sectioning and conventional practices. (Formerly DRAF 31)
Transfer Credit:CSU

DRAF 133
SHEET METAL LAYOUT AND APPLICATIONS 2 UNITS
Class hours:1 lecture, 3 lab
Prerequisite: DRAF 131 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
This course will familiarize students with sheet metal layout involving triangulation,
bend allowances for pattern development, and manufacturing processes for sheet metal. It will also include practical modern day applications in architecture, automotive, advertising displays and other areas affected by this technology. (Formerly DRAF 33)

Transfer Credit: CSU

DRAF 138
FUNDAMENTALS OF COMPUTER AIDED DRAFTING WITH AUTOCAD 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: DRAF 131 or ARCH 111 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
This is an introduction to computer aided drafting and design using AutoCAD software. It will prepare students to operate the systems and understand the applications of computer graphics, utilizing industry standards. Students will learn to use an interactive computer graphics system to prepare drawings on personal computers. Drawings will be stored and retrieved from regular or hard disks, enabling students to produce commercial quality copies using computer-driven plotter and printer.
(Formerly DRAF 38)
Transfer Credit: CSU

DRAF 151
ADVANCED APPLICATIONS OF COMPUTER AIDED DRAFTING AND DESIGN USING AUTOCAD 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: DRAF 138 and DRAF 153 or equivalent with grades of Credit or "C" or higher. ARCH 111 may be substituted for DRAF 153.
This course will assist students in the advanced applications of Computer Assisted Design. They will utilize the AutoCAD system for customization, use of symbol libraries, menu development, and general applications in their particular fields.
(Formerly DRAF 51)
Transfer Credit: CSU

DRAF 153
MACHINE DRAWING AND DESIGN WITH AUTOCAD 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: DRAF 131 and DRAF 138 or equivalent with grades of Credit or "C" or higher, or appropriate work experience. TM 50 or equivalent with a grade of Credit or "C" or higher or satisfactory completion of the Math Placement Process.
Corequisite: None.
Recommendation: None.

This course covers auxiliary projections, sections, dimensions, threads and fasteners, working drawings of machine parts including details and assemblies, basic gear and cam layout, and simple mechanisms.
(Formerly DRAF 53)
Transfer Credit: CSU

DRAF 160
AUTOCAD MAP 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: DRAF 138 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course introduces students to AutoCAD Map software which delivers all of the power, fluency, and connectivity of AutoCAD software. Content will include analysis and productivity tools to create, maintain, and produce maps in a precise graphical environment. Students will use AutoCAD Map software features to enhance productivity of comprehensive automated mapping tools built in for engineers, planners, utility managers, and anyone who creates and maintains maps.
Transfer Credit: CSU

DRAF 237
GRAPHICAL STATICS AND STRENGTH OF MATERIALS 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: TM 50 or equivalent with a grade of Credit or "C" or higher, DRAF 131 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This is a course in the fundamental principles of graphical statics and strength of materials and their applications to the solutions of typical force systems and equilibrium problems. Applications are made in the fields of drafting, tool engineering, and similar areas using elementary algebra and right angle trigonometry in problem solving.
(Formerly DRAF 37)
Transfer Credit: CSU

DRAF 255
AUTOCAD RENDERING AND SOLID MODELING APPLICATIONS 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: DRAF 138 and DRAF 153 or equivalent with grades of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.

This course will assist students in creating advanced applications of solid modeling and applying shading and rendering techniques utilizing AutoCAD. They will use the AutoCAD system for basic theory as well as applications to their particular fields.
(Formerly DRAF 55)
Transfer Credit: CSU

DRAF 256
INTRODUCTION TO AUTOCAD MECHANICAL DESKTOP 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: DRAF 138 and DRAF 153 or equivalent with grades of Credit or "C" or higher, or appropriate work experience.
Corequisite: None.
Recommendation: MTT 100 and MFGT 100 or equivalent with grades of Credit or "C" or higher.
This course assists students in creating three-dimensional parametric part modeling, assembly modeling and surface modeling designs. Students receive instruction utilizing the most recent release of AutoCAD interfacing with Mechanical Desktop.
(Formerly DRAF 56)
Transfer Credit: CSU

DRAF 257
ADVANCED APPLICATIONS OF AUTOCAD MECHANICAL DESKTOP 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: DRAF 256 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course assists students in advanced applications of three-dimensional parametric part modeling, assembly modeling, surface modeling, and bills of materials. Students receive instruction utilizing the most recent release of AutoCAD Mechanical Desktop.
(Formerly DRAF 57)
Transfer Credit: CSU

DRAF 258
DESIGN AND PRODUCTION TECHNOLOGY WITH AUTOCAD 4 UNITS
Class hours: 3 lecture/3 lab + 2 hrs. arr.
Prerequisite: DRAF 153 or equivalent with grade of Credit or "C" or higher, or appropriate work experience.
This course is a study of modern techniques of design using AutoCAD software. Instruction includes the production, opera-

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tion and process materials selection for AutoCAD plan. Planning, scheduling and cost performance are used to implement design solutions. (Formerly DRAF 58)
Transfer Credit:CSU

EARTH SCIENCE

(Science/Engineering/Math Division)

ESCI 101
PHYSICAL ECOLOGY  3 UNITS
Class hours: 2.5 hours lecture, and the equivalent of three one day field trips.
Prerequisite: None.
Recommendation: ENGL 100 clearance and MATH 40 or equivalent with a grade of Credit or “C” or higher.
This course is a general studies course including problems of current concern relating to hydrologic, oceanographic and atmospheric processes as they affect and are affected by man’s activities. The technologic, economic, and political aspects of pollution and solutions to environmental problems are studied. (Formerly ESCI 1)
Transfer Credit:CSU;UC

ESCI 101L
PHYSICAL ECOLOGY  FIELD LABORATORY  1 UNIT
Class hours: 3 lab
Prerequisite: Concurrent enrollment in ESCI 101 or prior completion of ESCI 101 or equivalent with a grade of Credit or “C” or higher.
This is a general studies course offering an opportunity for a more complete understanding of environmental problems discussed in Earth Science 101. It includes a hands-on approach to understanding the processes and materials involved in environmental problems by identification, measurement, and analysis in the field and in the lab. (Formerly ESCI 1.1)
Transfer Credit:CSU;UC

ESCI 104
OCEANOGRAPHY  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Math Placement Process or MATH 40 or equivalent with a grade of Credit or “C” or higher.
This course consists of an introduction to the geography of the oceans, geology of the ocean basins, and the chemistry and physics of seawater. The ecology of the sea and its effect on the ecosphere are also covered. Landforms and processes of the coastal zone and use and abuse of the marine environment are also discussed. This course is not open to students who have credit for ESCI 5. (Formerly ESCI 4)
Transfer Credit:CSU;UC

ESCI 106
WEATHER AND CLIMATE  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: ENGL 100 clearance and MATH 40 or equivalent with a grade of Credit or “C” or higher.
This course is a survey of the processes and patterns in the atmosphere which result in the regional distribution of weather and climate. (Formerly ESCI 6)
Transfer Credit:CSU;UC

ESCI 110
INTRODUCTION TO EARTH SCIENCE  4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: None.
Recommendation: ENGL 100 clearance and MATH 40 or equivalent with a grade of Credit or “C” or higher.
This course is designed for the non-science major. It is not open to those with college credit in geology, physical geography or physical anthropology. It is an integrated course designed to give broad, general knowledge in the areas of anthropology, astronomy, geology, geography, meteorology. (Formerly ESCI 10)
Transfer Credit:CSU;UC

ESCI 180
EARTH SCIENCE MATERIALS AND PREPARATIONS  1 UNIT
Class hours: 3 lab
Prerequisite: A college course in the earth sciences with a grade of Credit or “C” or higher.
This course is designed primarily for earth science majors. It includes the use and care of earth science materials with particular reference to the preparation and demonstration of laboratory set-ups. An introduction to stockroom procedures is included. As an alternative, a special project resulting in a report or display on some specific topic is possible. This course may be taken for a maximum of 2 units. (Formerly ESCI 20.16)
Transfer Credit:CSU

ECONOMICS

(Humanities/Social Sciences Division)

ECON 66T (Not degree applicable)
INDIVIDUAL ECONOMICS  0 UNIT
Class hours: 2 lab (17 weeks)
Open entry/open exit
Prerequisite: None.
Corequisite: Enrollment in an economics course.
Recommendation: None.
This is an individualized economics tutorial open entry/exit, credit/no credit, zero unit economics/math lab intended for students entering economics courses. This course will enable students to expand and improve the math skills needed in economics courses. Math and economic principles assignments are selected according to a student’s needs and learning style. Individualized instruction will be delivered through computer-assisted instruction, development of a personalized study system for each student, individual and group tutoring in economics and math areas, and meeting with economics instructors to evaluate student progress.

ECON 101
U.S. & GLOBAL ECONOMY  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This is a one-semester survey of basic economic concepts and institutions stressing the United States role 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. Students majoring in Economics or Business Administration should not enroll in this course. (Formerly ECON 3)
Transfer Credit:CSU;UC

ECON 102
WOMEN IN GLOBAL ECONOMY  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: ENGL 100 or equivalent with a grade of Credit or “C” or higher.
This course is an introduction to the global economy from the perspectives of women in developing countries. Drawing from various disciplinary fields such as economics, history, political science, anthropology and postcolonial studies, it examines critically the
processes of globalization that impact the multiple identities and oppressions which shape women's lives with respect to race, gender, class and culture. This course studies the consequences of strategies of modernization and neocolonialism employed by agencies of economic development such as the World Bank and International Monetary Fund on the lives of women in the developing countries and the surrounding ecological environment.

Transfer Credit:CSU;UC

ECON 201 (CAN ECON 2)
PRINCIPLES OF MACROECONOMICS 3 UNITS
Class hours:3 lecture
Prerequisite: MATH 40 or equivalent with a grade of Credit or "C" or higher, or satisfactory completion of the Math Placement Process.
Recommendation: ENGL 100 or equivalent with a grade of Credit or "C" or higher.
This one-semester course emphasizes the study of the macro-economy, business cycles of prosperity and recession, unemployment and inflation, Keynesian and classical theories, aggregate spending and the level of economic activity, banking and interest rates and the Federal Reserve, international trade and finance. (Formerly ECON 1.2)
Transfer Credit:CSU;UC

ECON 202 (CAN ECON 4)
PRINCIPLES OF MICROECONOMICS 3 UNITS
Class hours:3 lecture
Prerequisite: ECON 201 and MATH 80 or MATH 808 or equivalent with grades of Credit or "C" or higher.
Corequisite: None.
Recommendation: ENGL 100 or equivalent with a grade of Credit or "C" or higher.
This course emphasizes microeconomics; the study of the behavior of specific markets, firms and consumers in a market economy. This is an introduction to economics which is the study of how scarce resources are used to produce and distribute goods and services. The principle of economic choice and opportunity costs are emphasized. (Formerly ECON 1.1)
Transfer Credit:CSU;UC

ECON 204
MONEY, ETHICS, AND ECONOMIC JUSTICE 3 UNITS
Class hours:3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher.
Students will study the ethical issues such as pros and cons of capitalism, ethics of inequality, responsibilities to the poor, ethics and honesty in business, job responsibility, social obligations of corporations, affirmative action, and sexual harassment. (Formerly ECON 4)
Transfer Credit:CSU;UC

EDT 1
WINDOWS FOR EDUCATORS 1 UNIT
Class hours:1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
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. This course may be taken for a maximum of 4 units. (Formerly EDT 52)

EDT 2
MACINTOSH FOR EDUCATORS 1 UNIT
Class hours:1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
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. This course may be taken for a maximum of 4 units. (Formerly EDT 53)

EDT 4 (Not degree applicable)
INTEGRATION OF THE INTERNET TO THE CURRICULUM PART 2 - ADVANCED 1 UNIT
Class hours:1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed for educators who wish to expand their knowledge of the Internet and how to incorporate the Internet into the classroom curriculum. Participants will learn advanced Internet search methods, e-mail use and management, and techniques for using websites in the classroom. A supportive learning community will be provided for educators to collaborate and improve their skills in creating effective learning resources using suitable technologies. This course is offered on a credit/no credit basis only. (Formerly EDT 11.2/EDT 55)
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EDT 5 (Not degree applicable)
**INTEGRATION OF THE INTERNET TO THE CURRICULUM**

**PART 3 - CURRICULUM**

**1 UNIT**

Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
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 websites in these projects. A supportive learning community will be provided where educators collaborate and improve their skills in creating effective learning resources using suitable technologies. This course is offered on a credit/no credit basis only. (Formerly EDT 11.3/EDT 56)

**EDT 6**
**E-MAIL FOR EDUCATORS**

**1 UNIT**

Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course trains educators and prospective educators who wish to learn about e-mail and how to incorporate e-mail into the academic environment. Participants will learn the fundamentals of e-mail use and management techniques. Emphasis is placed on e-mail within the educational community. This course may be taken for a maximum of 4 units. (Formerly EDT 57)

**EDT 8**
**WORD FOR EDUCATORS II**

**1 UNIT**

Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course trains educators and prospective educators who wish to learn more about how to work with Word documents as they prepare curriculum. Participants will use intermediate Word functions such as search, replace, headers and footers, footnotes and hyphenation, thesaurus, macros, merge, math and outline functions. This course may be taken for a maximum of 4 units. (Formerly EDT 62)

**EDT 9**
**POWERPOINT FOR EDUCATORS I**

**1 UNIT**

Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
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. This course may be taken for a maximum of 4 units. (Formerly EDT 66)

**EDT 10**
**POWERPOINT FOR EDUCATORS II**

**1 UNIT**

Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course teaches presentation graphics using Microsoft PowerPoint. Topics include creating, managing, and delivering a multimedia curriculum-based presentation. Students will produce conceptual and data-intensive presentations, create professional output for overheads, on-screen presentations, speaker notes, and support handouts. This course may be taken for a maximum of 4 units. (Formerly EDT 67)

**EDT 11**
**EXCEL SPREADSHEETS FOR EDUCATORS**

**1 UNIT**

Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course teaches 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. This course may be taken for a maximum of 4 units. (Formerly EDT 70)

**EDT 12**
**ACCESS FOR EDUCATORS**

**1 UNIT**

Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course trains educators and prospective educators in the use of database management systems using Microsoft Access. Topics include techniques for building a database, tables, queries, and reports. This course may be taken for a maximum of 4 units. (Formerly EDT 71)

**EDT 14**
**WEB DESIGN FOR EDUCATORS**

**1 UNIT**

Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is for educators with little or no experience with Microsoft FrontPage for Windows/NT. Topics of instruction will be Web concepts, principles of good Web design, special populations compliance, FrontPage Interface, school Web site planning and building. This course may be taken for a maximum of 4 units. (Formerly EDT 75)

**EDT 15**
**EDUCATION HARDWARE/SOFTWARE EVALUATION**

**1 UNIT**

Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is for students 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. Troubleshooting skills will be addressed in this course. This course may be taken for a maximum of 4 units. (Formerly EDT 85)

**EDT 16**
**FUNDAMENTALS OF ONLINE COURSES**

**1 UNIT**

Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is for students wishing to learn the fundamentals of teaching online courses. Students will learn online course structures and delivery methods such as e-mail communication and Web site posting. This course may be taken for a maximum of 4 units. (Formerly EDT 86)

**EDT 17**
**COMPUTER INTEGRATION IN EDUCATORS**

**1 UNIT**

Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is for educators and prospective educators who wish to use computers in a specific subject or subject area. This course may be taken for a maximum of 4 units. (Formerly EDT 88)
### EDT 18
**DESKTOP PUBLISHING FOR EDUCATORS** 1 UNIT
- **Class hours:** 1 lecture
- **Prerequisite:** None.
- **Corequisite:** None.
- **Recommendation:** None.

This course provides an introduction to the fundamentals required to develop presentation materials such as letterheads, business cards, brochures, flyers, and newsletters. This course may be taken for a maximum of 4 units. (Formerly EDT 89)

### EDT 19
**FUNDAMENTALS OF TELECONFERENCING** 1 UNIT
- **Class hours:** 1 lecture
- **Prerequisite:** None.
- **Corequisite:** None.
- **Recommendation:** None.

This course introduces students to teleconferencing - the interactive transmission of images, sound, data, and control between two or more sites using digital lines. Emphasis will be placed on teleconferencing as a research and training tool in fields such as finance, health care, education, criminal justice, child care, and entertainment. Students will participate in live teleconferences and employ electronic technologies. This course may be taken for a maximum of 4 units. (Formerly EDT 90)

### EDT 20
**TELECONFERENCING FOR SMALL GROUPS** 2 UNITS
- **Class hours:** 2 lecture
- **Prerequisite:** None.
- **Corequisite:** None.
- **Recommendation:** None.

This course introduces students to the concepts and vocabulary of teleconferencing in small rooms and seminars. Emphasis is placed on safety, scheduling, event planning, wrap-around activities, audio and video fundamentals, audographics, and networking. Students will critically review videos of professional, small-group encounters. This course may be taken for a maximum of 4 units. (Formerly EDT 91)

### EDT 21
**TELECONFERENCE TELEMATICS** 1 UNIT
- **Class hours:** 1 lecture
- **Prerequisite:** None.
- **Corequisite:** None.
- **Recommendation:** None.

This course develops students' facility in developing telematics media, which employ both analog and digital technologies. Emphasis is placed on those production elements necessary to teleconferencing, including stage and set design, visual and audio media, meeting and conference protocols, and information gathering and distribution. This course may be taken for a maximum of 4 units. (Formerly EDT 92)

### EDT 22
**TELECONFERENCE REVIEW AND EVALUATION** 1 UNIT
- **Class hours:** 1 lecture
- **Prerequisite:** None.
- **Corequisite:** None.
- **Recommendation:** None.

This course introduces students to the evaluation criteria of teleconferenced events. Students will attend events at the Teleconference Center and the local area and produce written evaluations that employ objective and subjective measurements, audience feedback, and principles of quality control. This course may be taken for a maximum of 4 units. (Formerly EDT 93)

### EDT 23
**TELECONFERENCE PRODUCTION** 3 UNITS
- **Class hours:** 3 lecture
- **Prerequisite:** None.
- **Corequisite:** None.
- **Recommendation:** None.

This course provides students with direct experience in producing, directing, and evaluating live, interactive teleconferences, including auditorium, small group, and classroom site events. Emphasis is placed on safety, scheduling, event planning, "wrap-around" activities, audio and video fundamentals, audographics, and networking. Students will co-produce and critically review live teleconference events. This course may be taken for a maximum of 9 units. (Formerly EDT 94)

### EDT 24
**TELECONFERENCE PORTFOLIO** 3 UNITS
- **Class hours:** 3 lecture
- **Prerequisite:** None.
- **Corequisite:** None.
- **Recommendation:** None.

This course helps students prepare a video demonstrating their expertise of interactive, teleconferenced meetings and events. The course is a requirement for all students completing the Certificate in Teleconferencing Practitioner. This course may be taken for a maximum of 9 units. (Formerly EDT 95)

### EDT 29
**PREPARATION FOR ONLINE LEARNING** 1 UNIT
- **Class hours:** 1 lecture
- **Prerequisite:** None.
- **Corequisite:** None.
- **Recommendation:** None.

This course teaches students the skills necessary to successfully complete a class on the Internet. Topics include study skills, online student profiles, introduction to the Internet and the World Wide Web, using e-mail and other online services, and basic aspects of word processing. This course may be taken for a maximum of 2 units.

### EDT 30
**FUNDAMENTALS OF INSTRUCTIONAL MULTIMEDIA PRODUCTION** 2 UNITS
- **Class hours:** 2 lecture/1 lab
- **Prerequisite:** None.
- **Corequisite:** None.
- **Recommendation:** None.

The Fundamentals of Instructional Multimedia Production course focuses on the multi-media skills needed to work within today's educational environments. The course provides a foundation in the use of multimedia production equipment, computer software applications, and other resources to support educators and educational programs.

### EDT 43
**EDUCATIONAL OCCUPATION/WORK EXPERIENCE** 3 UNITS
- **Class hours:** 1 lecture
- **Prerequisite:** None.
- **Corequisite:** Enrollment in 7 or more units, including Educational Occupation Work Experience in a declared educational major.

Three units of Educational Occupation Work Experience require 180 non-paid hours or 225 paid hours of work per semester. Work experience provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences in the educational work place. The goal of the program is to assist students in expanding specific job skills. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a
program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to a career in education must be completed at the training site. Second semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. Three units of Educational Occupation Work Experience requires 180 non-paid hours of work or 225 paid hours of work per semester. This course may be taken for a maximum of 6 units. (Formerly EDT 73)

**EDT 64**

**HYPERSTUDIO BASICS 1 UNIT**

Class hours: 2 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is intended to teach educators the basics of HyperStudio, a popular software product for the K-12 learning environment. Topics include creating, managing, and delivering multimedia presentations. Students will produce stacks, buttons, objects, and animations using HyperStudio. Using the Internet and other resources, students will research lesson plan ideas utilizing HyperStudio to incorporate into their curricula. This course may be taken for a maximum of 4 units.

**EDT 65**

**ADVANCED HYPERSTUDIO 1 UNIT**

Class hours: 2 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is intended to teach educators more advanced features of HyperStudio, a popular software product for the K-12 learning environment. Topics include adding movies, sounds, and photos to the multimedia presentations, printing to video, and posting on the Internet. Students will learn to use New Button Actions (NBAs), linking to the Web, and scripting with HyperStudio. Using the Internet and other resources, students will create classroom projects and assessment tools to incorporate into their curricula. This course may be taken for a maximum of 4 units.

**EDT 67**

**INSPIRATION PRESENTATIONS 1 UNIT**

Class hours: 2 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is intended to teach educators the basics of Inspiration, an “idea-mapping and outlining software tool used in education. Students will create presentation diagrams and outlines to build and reinforce ideas. Students will learn to link presentations directly to the World Wide Web. Using the Internet and other resources, students will create lesson plans to incorporate into their curricula. This course may be taken for a maximum of 4 units.

**EDT 68**

**USING KIDPIX 1 UNIT**

Class hours: 2 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is intended to teach educators how to use and teach KidPix, a popular software product for the K-6 learning environment. Topics include creating desktop publishing projects, multimedia projects, and animation using KidPix. Using the Internet and other resources, students will create lesson plans to incorporate into their curricula. This course may be taken for a maximum of 4 units.

**EDT 85**

**VIRTUAL CURRICULUM 3 UNITS**

Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is intended to teach educators how to create conferenced and on-line (virtual) curriculum projects for use in the classroom and on the World Wide Web. Students in this course will be given guidelines for developing virtual museums, field trips, on-line exhibits, and exploratoriums from idea conception to the resulting conference or web pages for posting on the Internet. This course may be taken for a maximum of 12 units.

**EDT 100**

**INTEGRATION OF THE INTERNET TO THE CURRICULUM 1 UNIT**

Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
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 Internet search methods, e-mail use and management, and techniques for setting up a website for the classroom. A supportive learning community will be provided where educators collaborate to improve their skills in creating effective learning resources using suitable technologies. This course may be taken for a maximum of 4 units. (Formerly EDT 11.1/EDT 54/EDT 3)
Transfer Credit:CSU

**EDT 104**

**WORD FOR EDUCATORS I 1 UNIT**

Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course trains educators and prospective educators who wish to learn how to work with Word documents as they prepare curriculum. Participants will use basic Word functions to include entering, creating, editing, saving, inserting, deleting, formatting and spell-checking. This course may be taken for a maximum of 4 units. (Formerly EDT 62/EDT 7)
Transfer Credit:CSU

**EDT 110**

**INTRODUCTION TO EDUCATIONAL TECHNOLOGY 2 UNITS**

Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
Introduction to Educational Technology is designed to prepare future teachers with the understanding of how to utilize computers in the educational environment. Participants will learn basic computer terminology, fundamental Internet tools, basic word processing, the use of electronic spreadsheets and use of database management systems. A supportive learning community will be provided where future educators will learn skills in creating effective learning resources using suitable technologies.
Transfer Credit:CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
ELECTRONICS
(Title II Division)

EL 37L (Not degree applicable)
TROUBLESHOOTING SERVICE AND REPAIR LABORATORY 2 UNITS
Class hours: 6 lab
Prerequisite: EL 202 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This is a laboratory course only. It is designed for advanced students who wish to improve their proficiency in servicing and troubleshooting electronic equipment. This course may be taken for a maximum of 4 units. (Formerly EL 37)

EL 43/44 (Not degree applicable)
ELECTRONICS OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Electronics work experience 73 or 20 hours of employment per week for Electronics work experience 74. The employment must be in a job related to the student’s educational goal.
Corequisite: Enrollment in the Electronics vocational program with 7 or more units including occupational work experience.
Work experience/career internship provides the opportunity for Electronics students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers.
Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to the major and job skills must be completed on the job/training site. These courses may be taken for a maximum of 15-16 units. (Formerly EL 73/74)

EL 50  ELECTRONIC TESTS AND MEASUREMENTS 1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: EL 100 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: EL 100 or equivalent with a grade of Credit or “C” or higher.

This is a course in the use of electronic testing equipment. Topics include measurement theory, techniques, limitations of test equipment, and interpretation of test results. This course may be repeated for a maximum of 3 units. (Formerly EL 97.1/EL 18)

EL 52  BASIC VCR SERVICING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: EL 202 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is an introduction to the theory, operation and servicing of home video cassette recorders using either BETA or VHS format. The major emphasis is on understanding circuits and service techniques. (Formerly EL 47)

EL 53A  INTRODUCTION TO MICROPROCESSORS 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: EL 202 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is an introduction to microprocessor hardware and software. Topics discussed include the history of the microprocessor and microcontroller families, hardware and software tools, assembly language programming, data structures, subroutine calls, interrupts, and parallel input/output(I/O). This course may be taken for a maximum of 6 units. (Formerly EL 44.1)

EL 53B  ADVANCED MICROPROCESSORS 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: EL 53A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course builds on the principles learned in EL 53A as embedded control applications are investigated. Topics discussed include counter-timer applications, serial communication techniques, analog signal conversion, and embedded control. This course may be taken for a maximum of 6 units. (Formerly EL 44.2)

EL 54  A+ CERTIFICATION MICROCOMPUTER REPAIR AND SERVICING 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisites: None.
Corequisite: None.
Recommendation: EL 100, EL 134 or EL 114 and EL 124, and TM 50.
This course instructs the student in fundamentals of troubleshooting and repair of microcomputers using both hardware and software testing techniques. Different types and sizes of microprocessor systems will be discussed. This course prepares the student for the hardware portion of A+ Certification. Laboratory assignments will accompany the lecture material. Some familiarity with a high-level programming language is recommended.

EL 56  PROGRAMMABLE LOGIC CONTROLLERS 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: EL 100 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course introduces the student to programmable logic controllers (PLC). Topics to be discussed include history of the PLC, ladder diagrams, programming techniques, programming languages, installation, troubleshooting, and maintenance of the PLC. (Formerly EL 16)

EL 60  COMPUTER AIDED CIRCUIT ANALYSIS 1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: EL 100 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is an introduction to the fundamentals of computer-aided circuit simulation and electronic design automation (EDA). The emphasis is on the use of the computer in designing and testing electronic circuits for more productive hardware construction. This course may be repeated for a maximum of 3 units. (Formerly EL 97.2/EL 15)

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EL 100
Prerequisite: EL 100 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience, and satisfactory completion of the Math Placement Process or TM 50 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None. This is a course in the fundamentals of optoelectronics. Topics to be covered include the behavior of light, optics, light sources, lasers, displays, detectors, optical sensors, optocouplers, and fiber optics. (Formerly EL 51)

EL 66
FUNDAMENTALS OF ELECTRICITY 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
Corequisite: None. This course introduces the student to the principles of electrical power. Topics to be discussed include electrical safety, generators, motors, wiring, National Electrical Code (NEC), installation, and maintenance. (Formerly EL 19)

EL 66A
INTRODUCTION TO AUTOMATED MANUFACTURING (ROBOTICS) 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisites: EL 134 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Recommendation: None. This course provides an overview of the current robotics industry starting with a brief history which is followed by a review of the basic terms used in the field. The robots are classified by geometry, power source, application, path control and intelligence. The operation of different types of end effectors is covered along with robot controllers and the basic system sensors. Basic programming techniques are covered. (Formerly EL 55)

EL 66B
AUTOMATED MANUFACTURING (ADVANCED ROBOTICS) 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: EL 96A or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Recommendation: None. This course is designed to prepare technicians in robotics design and research, robot applications, installations, programming, "start-up" procedures, customer service, troubleshooting and maintenance. The technician will have an understanding in integrated systems. The course covers the operation of work cells including vision systems, tactile sensing, offline programming, interfacing to external computers, and voice input and output. Use of vision and touch sensing will be emphasized. (Formerly EL 56)

EL 76
INDUSTRIAL ELECTRONIC CONTROL 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: EL 124 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Corequisite: EL 200 or equivalent. This course is a course in the application of electronic circuitry to industrial process control. Topics to be discussed include mechanical systems, sensors, motors, actuators, feedback control, switching circuits, relay control, power-control semiconductors and interfacing of electronic circuits to mechanical, hydraulic and pneumatic systems. (Formerly EL 46)

EL 86
ELECTRIC MOTOR CONTROL 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: EL 100 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Corequisite: None. This course presents the principles of motor control. Topics to be discussed include safety, classifications of motors, speed control, and motor applications.

EL 94
INTRODUCTION TO DIGITAL SIGNAL PROCESSING 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: EL 200 and EL 244 or equivalent with grades of Credit or "C" or higher, or appropriate work experience.
Corequisite: None. This course introduces the student to the concepts of digital signal processing (DSP). Topics to be covered include DSP chip architecture, interfacing, programming, digital filtering, voice recognition, and telecommunications applications. Laboratory experiments will demonstrate the application of DSP devices.

EL 96A
INTRODUCTION TO OPTOELECTRONICS 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: EL 134 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Recommendation: None. This is an advanced course in electronic data transmission media, multiplexing techniques, circuit switching, relay control, power-control semiconductors and interfacing of electronic circuits to mechanical, hydraulic and pneumatic systems. (Formerly EL 64.2)

EL 96B
OPTOELECTRONICS 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: EL 64A or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Corequisite: None. This is an advanced course in electronic data communications generally covering the electronic principles of Wide and Local Area Networks. The open system interconnection (OSI) reference model is used for comparison of different WAN and LAN implementation and their corresponding technical issues. The transport control protocol/internet protocol (TCP/IP), asynchronous transfer mode (ATM), Frame Relay, integrated services digital network (ISDN), and broadband (BISDN) are among the cases to be studied. (Formerly EL 64.2)
will cover DC and AC electrical theory, magnetism, transistors, and integrated circuits. Basic concepts of electronic devices, circuits, and systems will be demonstrated. (Formerly EL 1)
Transfer Credit: CSU

**EL 110**
**PRINCIPLES OF DC ELECTRONICS**  
4 UNITS  
Class hours: 4 lecture  
Prerequisite: None.  
Corequisite: TM 50 or equivalent.  
Recommendation: EL 100 or equivalent with a grade of Credit or “C” or higher.  
This course covers atomic structure and the electron theory, Ohm’s and Kirchhoff’s laws for DC circuits, magnetism, inductance, capacitance, DC measurements, and DC network analysis. (Formerly EL 10)  
Transfer Credit: CSU

**EL 114L**
**FUNDAMENTALS OF DIGITAL ELECTRONICS LAB**  
1 UNIT  
Class hours: 3 lab  
Prerequisite: None.  
Corequisite: EL 114 or equivalent.  
Recommendation: None.  
This is a laboratory course designed to support the concepts learned in EL 114. Fundamentals of Digital Electronics. Experiments are used to verify the applications of number systems, Boolean algebra, logic symbols, and computer codes. Design projects are assigned to be constructed using integrated circuits and computer simulations. This course may be repeated for a maximum of 2 units. (Formerly EL 14.1)  
Transfer Credit: CSU

**EL 120**
**PRINCIPLES OF AC ELECTRONICS**  
4 UNITS  
Class hours: 4 lecture  
Prerequisites: EL 110 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
This course covers the analysis of AC circuits using both resistive and reactive components. The concept of resonance and filter circuits is introduced and network theorems are studied. (Formerly EL 20)  
Transfer Credit: CSU

**EL 120L**
**AC ELECTRONICS LABORATORY**  
1 UNIT  
Class hours: 3 lab  
Prerequisites: EL 120 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
Experiments performed in this course are planned to accompany the lectures in EL 120. The student learns to use instrumentation in the measurement and analysis of AC circuits. Color code, symbols, schematics and assembly techniques are introduced. (Formerly EL 20.1)  
Transfer Credit: CSU

**EL 134**
**DIGITAL CIRCUITS AND COMPUTER LOGIC**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: EL 100 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: EL 134L  
Recommendation: TM 54  
This is a laboratory course designed to support the concepts learned in EL 124. Experiments are used to verify the applications of flip-flops, multivibrator circuits, sequential logic, memory systems, interfacing, and microprocessors. Design projects are assigned to be constructed using integrated circuits and computer simulations. (Formerly EL 24.1)  
Transfer Credit: CSU

**EL 134L**
**DIGITAL CIRCUITS AND COMPUTER LOGIC LAB**  
1 UNIT  
Class hours: 3 lab  
Prerequisite: EL 100 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: EL 134 or equivalent.  
Recommendation: None.  
This is a laboratory course designed to support the concepts learned in EL 134. Digital Circuits and Computer Logic. Experiments are used to apply the use of number systems, Boolean algebra, and logic symbols to design and construction of

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**Announcement of Courses**

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combinational and sequential digital electronic circuits. Basic multivibrator, memory, microprocessor, and interfacing circuits are also covered. Design projects assigned are to be constructed using integrated circuits and computer simulations.

Transfer Credit: CSU

EL 200

SEMICONDUCTOR ELECTRONICS 3 UNITS
Class hours: 3 lecture
Prerequisites: EL 120 or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
Corequisite: None.
Recommendation: EL 100 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.

EL 200L

SEMICONDUCTOR ELECTRONICS LABORATORY 1 UNIT
Class hours: 3 lab
Prerequisite: EL 200 or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
Corequisite: None.
Recommendation: None.
Experiments planned to accompany the lectures in EL 200 covering semiconductor diodes, transistors and transistor amplifiers are included in this course. (Formerly EL 30)
Transfer Credit: CSU

EL 202

RADIO AND TV THEORY AND SERVICING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: EL 200 or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
Theory of superheterodyne receivers and practice in servicing of electronic circuits with special emphasis on commercial radio and television receivers will be explored. (Formerly EL 33)
Transfer Credit: CSU

EL 205

BIO-MEDICAL ELECTRONICS 4 UNITS
Class hours: 3 lecture/3 lab (Fall only)
Prerequisite: EL 200 or equivalent with a grade of Credit or "C" or higher or concurrent enrollment, or appropriate work experience.
Corequisite: None.
Recommendation: None.

EL 210

ELECTRONIC SYSTEMS ANALYSIS 3 UNITS
Class hours: 3 lecture
Prerequisite: EL 200 or equivalent with a grade of Credit or "C" or higher, or concurrent enrollment.
Corequisite: None.
Recommendation: EL 210L or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.

EL 210L

SYSTEMS ANALYSIS LABORATORY 1 UNIT
Class hours: 3 lab
Prerequisite: EL 210 or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
Corequisite: None.
Recommendation: None.
Experiments planned to accompany the lectures in EL 210 covering power supplies, oscillators, switching and logic circuits, and phase locked loops are included in this course. (Formerly EL 40)
Transfer Credit: CSU

EL 220

LINEAR INTEGRATED CIRCUITS 3 UNITS
Class hours: 3 lecture
Prerequisite: EL 200 or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
Corequisite: None.
Recommendation: EL 220L or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
This course is an introduction to the basics of linear circuits in integrated form. Emphasis is on the operational amplifier, how it functions in theory and practice, its wide range of applications, and its limitations. (Formerly EL 41)
Transfer Credit: CSU

EL 220L

LINEAR INTEGRATED CIRCUITS LABORATORY 1 UNIT
Class hours: 3 lab
Prerequisite: EL 210 or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
Corequisite: None.

The source and nature of electrophysical phenomenon, as it relates to instrumentation, will be explored. The principles of laboratory and therapeutic equipment will be discussed. This will be followed by a study of the practical application of technology to the maintenance, repair and calibration of analysis and patient monitoring equipment. Hospital safety and the problems peculiar to the Intensive Care Unit will also be covered. (Formerly EL 35)
Transfer Credit: CSU

ELECTRONIC LABORATORY 1 UNIT
Class hours: 3 lecture
Prerequisite: EL 200 or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
Corequisite: None.

EL 215

BIO-MEDICAL INSTRUMENTATION 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: EL 200 or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
This course is designed to provide laboratory experiences in communications circuits and devices. The experiments correlate with the lecture material in EL 212 - Electronic Communications. (Formerly EL 42.1)
Transfer Credit: CSU

EL 212L

ELECTRONIC COMMUNICATIONS LAB 1 UNIT
Class hours: 3 lab
Prerequisite: EL 200 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Corequisite: EL 212.
Recommendation: None.
This course is designed to provide laboratory experiences in communications circuits and devices. The experiments correlate with the lecture material in EL 212 - Electronic Communications. (Formerly EL 42.1)
Transfer Credit: CSU

EL 215

BIO-MEDICAL INSTRUMENTATION 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: EL 200 or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
This course is a study of the theory, application, operation, calibration and troubleshooting of Bio-Medical Electronics Instrumentation. It will also include practice in servicing of electronic circuits with special emphasis on Commercial Medical Electronics. (Formerly EL 45)
Transfer Credit: CSU

EL 220

LINEAR INTEGRATED CIRCUITS 3 UNITS
Class hours: 3 lecture
Prerequisite: EL 200 or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
Corequisite: None.
Recommendation: EL 220L or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
This course is an introduction to the basics of linear circuits in integrated form. Emphasis is on the operational amplifier, how it functions in theory and practice, its wide range of applications, and its limitations. (Formerly EL 41)
Transfer Credit: CSU

EL 220L

LINEAR INTEGRATED CIRCUITS LABORATORY 1 UNIT
Class hours: 3 lab
Prerequisite: EL 210 or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
Corequisite: None.
This is a laboratory course. Experiments performed in this course are planned to accompany the lectures in EL 220 (Linear Integrated Circuits). In this course the student will construct, test and make measurements verifying common characteristics of various linear integrated circuits. (Formerly EL 41.1) Transfer Credit: CSU

**EL 222 ADVANCED RADIO AND TV SERVICING 3 UNITS**
Class hours: 2 lecture, 4 lab
Prerequisite: EL 202 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course is a study of the special types of circuitry employed in radio and television receivers, including deflection oscillators and amplifiers, high voltage circuits, pulse amplification, high frequency tuners, color circuitry, and multiplex circuits. (Formerly EL 43) Transfer Credit: CSU

**EL 244 INTRODUCTION TO MICROCOMPUTERS 4 UNITS**
Class hours: 3 lecture/2 lab
Prerequisite: EL 134 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is an introduction to the fundamental operations of a general purpose microcomputer. The course will include a study of the memory system, the microprocessor, and input/output circuits. The basic instruction/execute cycle will be discussed and microprocessor machine level programming will be introduced. (Formerly EL 44) Transfer Credit: CSU

**ENERGY 110 ENERGY AND THE WAY WE LIVE 3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Math Placement Process or MATH 40 or equivalent with a grade of Credit or “C” or higher.
This introductory course describes the importance of energy in natural systems, energy resources, and utilization of energy by Man in modern economies. The potential for conservation and use of alternatives to the fossil fuels is studied. (Formerly ENGR 10) Transfer Credit: CSU; UC

**ENGINEERING (Science/ Engineering/ Math Division)**

**ENGR 112 ENGINEERING GRAPHICS 3 UNITS**
Class hours: 6 lecture/lab
Prerequisite: None.
Recommendation: MATH 140 or equivalent with a grade of Credit or “C” or higher.
The principles of the graphic language of the engineer expressed through sketching and instrument drawings covering orthographic projection, primary and secondary auxiliary views, dimensioning, and the working drawing. The descriptive geometry methods applied to points, lines, planes, intersections, warped surfaces, developments, and graphical mathematics. Required of all engineering students. (Formerly ENGR 12) Transfer Credit: CSU; UC

**ENGR 123 DESCRIPTIVE GEOMETRY 3 UNITS**
Class hours: 6 lecture/lab
Prerequisite: MATH 140 or TM 50 and DRAF 153 or equivalent with grades of Credit or “C” or higher.
This course covers the fundamental principles of descriptive geometry. The course emphasizes applications of these principles to solutions of three dimensional engineering and design technology problems. (Formerly ENGR 23) Transfer Credit: CSU; UC

**ENGR 215 ENGINEERING ELECTRIC CIRCUITS 3 UNITS**
Class hours: 3 lecture
Prerequisite: PHYS 202 or equivalent with a grade of Credit or “C” or higher.
This course includes the study of the fundamental principles essential to understanding electric circuits. These include Kirchhoff’s Laws, Ohm’s Law, network theorems, Mesh and Nodal analysis, Thevenin and Norton equivalent, inductors and capacitors, resistor capacitor and resistor coil circuits, and sinusoidal steady-state analysis and calculations. (Formerly ENGR 15/ENGR 115) Transfer Credit: CSU; UC

**ENGR 235 STATICS 3 UNITS**
Class hours: 3 lecture (Spring only)
Prerequisite: MATH 170 and PHYS 101 or PHYS 201 or equivalent with grades of Credit or “C” or higher.
This course covers the part of the science of mechanics that deals with external force systems and equilibrium conditions on bodies. (Formerly ENGR 35/ENGR 135) Transfer Credit: CSU; UC

**ENGLISH (Liberal Arts Division)**

**ENGL 10 ONLINE WRITING PROJECT 0 UNIT**
Class hours: 2 lab
Open entry/open exit
Corequisite: None.
Recommendation: Concurrently enrolled in a college course that requires written assignments.
This course is an online writing project individually tailored for any student with writing needs, including developing and organizing ideas, grammar, punctuation, and overcoming ESL interference. This course can be taken in connection with any course at the college, which requires written assignments. (Formerly ENGL 99)

**ENGL 20 BASIC WRITING 3 UNITS**
Class hours: 3 lecture/1 lab
Prerequisite: Satisfactory completion of the English Placement Process or ESL 200 or equivalent with a grade of Credit or “C” or higher.
This course introduces students to the writing process as a means of developing ideas into clear, correct, and effective writing. The course concentrates on short essay writing in accord with the conventions of standard English. (Formerly ENGL 50.1)

**ENGL 22 SPANNING BASICS 1 UNIT**
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.

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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. (Formerly ENGL 69.4/ENGL 64.1)

**ENGL 30** (Not degree applicable)
**GRAMMAR BASICS** 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides students with instruction in editing their own writing for standard grammar. This course is offered on a credit/no credit basis only. (Formerly ENGL 69.5/11.1)

**ENGL 31** (Not degree applicable)
**PUNCTUATION BASICS** 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course develops the students’ 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. (Formerly ENGL 11.5)

**ENGL 50A**
**ENGLISH GRAMMAR** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Students will study the fundamentals of English grammar, with an emphasis on parts of speech, phrases and clauses, sentence structure, and correct usage. Class hours may be used to qualify a student for the certified shorthand reporters’ examination. (Formerly ENGL 11)

**ENGL 50B**
**ADVANCED GRAMMAR** 3 UNITS
Class hours: 3 lecture
Prerequisite: ENGL 50A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course further develops the student’s ability to analyze the structure of English sentences, to recognize and correct errors in usage, punctuation and grammar, and to generate sentences of varied complexity. Class hours may be used to qualify a student for the certified shorthand reporters’ examination. (Formerly ENGL 11.5)

**ENGL 52**
**INTRODUCTION TO COLLEGE COMPOSITION** 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Credit or “C” or higher.
Recommendation: None.
This course develops the students’ ability to write clearly, effectively, and correctly by guiding students through the writing process. Students write a series of compositions that integrate critical thinking, evaluative writing, and research. (Formerly ENGL 50.2)

**ENGL 53**
**PUNCTUATION, CAPITALIZATION AND SPELLING** 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course gives comprehensive instruction in preparation of written materials, with particular emphasis on punctuation, capitalization, abbreviations, numbers, spelling, and manuscript preparation. Class hours may be used to qualify a student for the certified shorthand reporters’ examination. (Formerly ENGL 12)

**ENGL 100** (CAN ENGL 2)
**FRESHMAN COMPOSITION** 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course guides the student through the writing process to develop expository prose with an emphasis on effective organization and content. It meets transfer requirements for four-year institutions. (Formerly ENGL 1)
Transfer Credit: CSU; UC

**ENGL 102** (CAN ENGL 4)
**FRESHMAN COMPOSITION AND LITERATURE** 3 UNITS
Class hours: 3 lecture
Prerequisite: ENGL 100 or equivalent with a grade of Credit or “C” or higher.
This course continues to develop and improve skills in composition and critical analysis by introducing the study of fiction, poetry, drama, and film produced by an enlarged canon of authors from culturally diverse backgrounds as the subjects for writing assignments. (Formerly ENGL 2)
Transfer Credit: CSU; UC

**ENGL 103**
**CRITICAL AND ARGUMENTATIVE WRITING** 3 UNITS
Class hours: 3 lecture
Prerequisite: ENGL 100 or equivalent with a grade of Credit or “C” or higher.
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. (Formerly ENGL 3)
Transfer Credit: CSU; UC

**ENGL 106**
**INTRODUCTION TO LANGUAGE STUDY** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is the study of language structure and language use. This includes the historical development of language families, the universal properties of these languages, and the individual speech acts that derive from a given language. (Formerly ENGL 6)
Transfer Credit: CSU; UC
ENGL 107  
**VOCABULARY BUILDING**  3 UNITS  
Class hours:3 lecture  
Prerequisite: None.  
This is a course in vocabulary building that emphasizes the structural approach to vocabulary study. Emphasis is placed on the prefixes, roots, and suffixes as they combine to form words, and on the meanings and patterns of meanings formed by words in the context of a sentence and paragraph. (Formerly ENGL 7)  
Transfer Credit:CSU

ENGL 108  
**VOCABULARY BUILDING FOR PROFESSIONALS**  2 UNITS  
Class hours:2 lecture  
Prerequisite: None.  
This course is designed to further an understanding of word origins, roots and affixes, with particular attention to terms used in business and the professional disciplines. Class hours may be used to qualify a student for the certified shorthand reporters’ examination. (Formerly ENGL 8)  
Transfer Credit:CSU

ENGL 155  
**TECHNICAL WRITING**  3 UNITS  
Class hours:3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Credit or “C” or higher.  
This course enhances students’ ability to write clear, effective, and correct technical prose. Students write a series of technical instructions, reports, manuals, and proposals that integrate critical thinking, evaluation, and research. Students will produce a letter of application and resume for technical fields. (Formerly ENGL 5)  
Transfer Credit:CSU

ENGL 221A  
**LITERATURE IN THE BIBLE: HEBREW SCRIPTURES**  3 UNITS  
Class hours:3 lecture  
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.  
This course is a general introduction to the literature composing the Hebrew Scriptures (more familiarly known as the Old Testament) in translation. Emphasis will be on understanding the Bible as a literary document through literary analysis, including the study of biblical genres such as history, poetry, narrative, drama, and homiletic, prophetic, apocalyptic and wisdom literature. (Formerly ENGL 21.1)  
Transfer Credit:CSU;UC

ENGL 221B  
**LITERATURE IN THE BIBLE: CHRISTIAN SCRIPTURES**  3 UNITS  
Class hours:3 lecture  
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.  
This course studies the New Testament in English in translation as a literary document. Emphasis is on understanding the literary nature of the Bible through literary analysis, including the study of literary genres such as poetry, epistolary, narrative, drama and biography. (Formerly ENGL 21.2)  
Transfer Credit:CSU;UC

ENGL 222  
**CHILDREN’S LITERATURE**  3 UNITS  
Class hours:3 lecture  
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
The course is designed to survey children’s literature with special emphasis on the classics. It concentrates on the fable, folktales, fairy tales and the children’s novel. (Formerly ENGL 22)  
Transfer Credit:CSU;UC

ENGL 223  
**CHICANA/ O LITERATURE**  3 UNITS  
Class hours:3 lecture  
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
This course is a study of selected representative literature of Chicano authors. Selected works will be drawn from at least three of the following genres: the novel, the short story, poetry, drama, autobiography, and the essay. (Formerly ENGL 23)  
Transfer Credit:CSU;UC

ENGL 224  
**NATIVE AMERICAN LITERATURE**  3 UNITS  
Class hours:3 lecture  
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
This course is a study of selected representative literature of Native North American Indian writers. The genres included are the novel, the short story, poetry, autobiography, and essay. (Formerly ENGL 24)  
Transfer Credit:CSU;UC

ENGL 225  
**MEXICAN LITERATURE IN TRANSLATION**  3 UNITS  
Class hours:3 lecture  
Prerequisite: None.  
A one-semester course to survey Mexican literature in translation. The genres included will be the novel, the short story, the poem, the essay, and the song. (Formerly ENGL 25)  
Transfer Credit:CSU;UC

ENGL 226  
**AFRICAN AMERICAN LITERATURE**  3 UNITS  
Class hours:3 lecture  
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
This course is a study of selected or representative literature of African and African American authors, their viewpoints, styles, forms, and themes. The genres included will be the novel, the short story, drama, poetry, autobiography, essays, and oral performance. Modern and contemporary authors will be highlighted. (Formerly ENGL 26)  
Transfer Credit:CSU;UC

ENGL 227  
**CURRENT LITERATURE**  3 UNITS  
Class hours:3 lecture  
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.  
This course is a study of literature currently important or currently popular and not ordinarily studied in the regular departmental curriculum. Specific topics, such as best sellers, science fiction, campus classics, California literature, Native American litera-
tured, or modern literature, will be announced in the schedule of classes. It may be repeated with different topics for a maximum of 6 units. (Formerly ENGL 27)
Transfer Credit:CSU;UC

ENGL 228
SHAKESPEARE’S PLAYS 3 UNITS
Class hours:3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course is a general introduction to Shakespeare’s plays. Representative selections from the comedies, histories, tragedies, and romances are studied. The emphasis is on discussion and analysis of Shakespeare’s relevance to his world and to ours. (This is not an acting class.) (Formerly ENGL 28)
Transfer Credit:CSU;UC

ENGL 229
AUTOBIOGRAPHICAL LITERATURE/WRITING 3 UNITS
Class hours:3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course will advance composition skills in the special area of autobiography through journal writing and the development of a significant autobiography. Autobiographical works by important writers will be read for modeling purposes. (Formerly ENGL 29)
Transfer Credit:CSU;UC

ENGL 230A
(int can ENGL seq q)(int can ENGL 14)
INTRODUCTION TO AMERICAN LITERATURE 3 UNITS
Class hours:3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course studies the representative works of American literature from 1608-1870. Selected works will be drawn from the four major literary periods: Puritan, Enlightenment/Revolutionary, Romantic, and early Realism. (Formerly ENGL 30.1)
Transfer Credit:CSU;UC

ENGL 230B
(int can ENGL seq q)(int can ENGL 16)
INTRODUCTION TO AMERICAN LITERATURE 3 UNITS
Class hours:3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course studies the 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. (Formerly ENGL 30.2)
Transfer Credit:CSU;UC

ENGL 232
READINGS IN POETRY 3 UNITS
Class hours:3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course introduces students to the basic elements and functions of poetry. The fundamentals of poetics will be covered from Aristotle to new media and digital media. A representative poet will be studied in depth. (Formerly ENGL 32)
Transfer Credit:CSU;UC

ENGL 233
READINGS IN THE DRAMA 3 UNITS
Class hours:3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This is a course in the novel emphasizing structure, theme and style. Outstanding Continental, English and American novels are studied. (Formerly ENGL 33)
Transfer Credit:CSU;UC

ENGL 234
READINGS IN SHORT FICTION 3 UNITS
Class hours:3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course studies the structure and techniques of the short story and the novelette. Emphasis is on critical analysis of selected American, European and World short fiction throughout time, including contemporary works. (Formerly ENGL 34)
Transfer Credit:CSU;UC

ENGL 235
READINGS IN THE DRAMA 3 UNITS
Class hours:3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course studies the 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. (Formerly ENGL 35)
Transfer Credit:CSU;UC

ENGL 236
STUDIES IN WOMEN’S LITERATURE 3 UNITS
Class hours:3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is a survey of literature by women reflecting women’s changing roles and identities in society in various historical, political and cultural settings. Works studied are drawn from the genres of poetry, fiction, drama, essays and journals.
Transfer Credit:CSU;UC

ENGL 237
ASIAN AMERICAN LITERATURE 3 UNITS
Class hours:3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course is a study of selected representative literature written by Americans of Asian or Pacific Island descent. The genres included are the novel, drama, short story, and poetry. Memoirs and essays may be included. (Formerly ENGL 37)
Transfer Credit:CSU;UC

ENGL 240
(CAN ENGL 6)
CREATIVE WRITING 3 UNITS
Class hours:3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course provides an opportunity for students to explore their interest in literary creativity by writing original short fiction, poetry, play or screenplay, or magazine articles. Writers will gain understanding of each literary type, have the opportunity to create in each area, and be afforded the chance to have their work critiqued in a workshop setting. This course may be taken for a maximum of 6 units. (Formerly ENGL 40)
Transfer Credit:CSU;UC

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
ENGL 241
SCRIPTWRITING FOR TELEVISION
AND MOTION PICTURES 3 UNITS
Class hours:3 lecture
Prerequisite: Satisfactory completion of the
English Placement Process or ENGL 52 or
equivalent with a grade of Credit or “C” or
higher.
This course provides an opportunity for
students to develop a screenplay for television or
motion pictures. Students learn the craft of
screenwriting by studying published scripts,
movies, and TV shows and by writing synopses,
treatments, scenes, and a production-worthy
screenplay. This course may be taken for a
maximum of 6 units. (Formerly ENGL 41)
Transfer Credit:CSU;UC

ENGL 246A (CAN ENGL SEQ B)/(CAN ENGL 8)
SURVEY OF
ENGLISH LITERATURE 3 UNITS
Class hours:3 lecture
Prerequisite: ENGL 100 or equivalent with a
grade of Credit 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.
(Formerly ENGL 46.1)
Transfer Credit:CSU;UC

ENGL 246B (CAN ENGL SEQ B)/(CAN ENGL 10)
SURVEY OF
ENGLISH LITERATURE 3 UNITS
Class hours:3 lecture
Prerequisite: ENGL 100 or equivalent with a
grade of Credit 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. (Formerly
ENGL 46.2)
Transfer Credit:CSU;UC

ENGL 248A
MASTERPIECES OF
WORLD LITERATURE 3 UNITS
Class hours:3 lecture
Prerequisite: Satisfactory completion of the
English Placement Process or ENGL 52 or
equivalent with a grade of Credit or “C” or
higher.
This course studies Western and world litera-
ture from the ancient world to the 17th century.
Various themes, forms and trends are exam-
ined 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 UNITS
Class hours:3 lecture
Prerequisite: Satisfactory completion of the
English Placement Process or ENGL 52 or
equivalent with a grade of Credit or “C” or
higher.
This course studies Western and world litera-
ture 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. (Formerly
ENGL 49/ENGL 48.2)
Transfer Credit:CSU;UC

ENGLISH AS A SECOND LANGUAGE
(Liberal Arts Division)

ESL 1 (Not degree applicable)
ENGLISH AS A SECOND LANGUAGE:
INTRODUCTION 5 UNITS
Class hours:5 lecture
Prerequisite: None.
This course is designed to prepare the limited
English-speaking person for college ESL
study. It bridges the gap between life-skills
English and beginning college ESL courses.
It is multi-skills oriented, aiming at speaking,
listening, reading, writing, and grammar
skills. (Formerly ESL 69.2/ESL 60)

ESL 2 (Not degree applicable)
INTERMEDIATE SKILLS
FOR THE ESL STUDENT 5 UNITS
Class hours:5 lecture/1 lab
Prerequisite: Satisfactory completion of the
English As A Second Language Placement
Process or ESL 1 or equivalent with a grade of
Credit or “C” or higher.
This course introduces and reviews basic
structures of English and provides opportu-
nity 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. (Formerly ESL 1)

ESL 3 (Not degree applicable)
ADVANCED INTERMEDIATE
SKILLS FOR THE ESL STUDENT 5 UNITS
Class hours:5 lecture/1 lab
Prerequisite: Satisfactory completion of the
English As A Second Language Placement
Process or ESL 2 or equivalent with a grade of
Credit or “C” or higher.

This course introduces advanced and high-
frequency structures of English and provides
practice of these structures. Texts and
supplemental materials are used as well as
the students’ environment. Sounds continue
to be practiced orally. Writing and reading
reinforce comprehension. (Formerly ESL 2)

ESL 4 (Not degree applicable)
SHELTERED ENGLISH AS A SECOND
LANGUAGE/AMERICAN HISTORY 0 UNIT
Class hours:12 lecture/4 lab (3 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is an intermediate ESL integrated-skills,
content-based class using topics from
American history and the geography of
events, people and places important in the
political, social, and cultural history of the
U.S. Topics will be presented in a simplified
format using standard ESL methodology.
(Formerly ESL 70)

ESL 10 (Not degree applicable)
ESL SPEAKING AND LISTENING 3 UNITS
Class hours:3 lecture/1 lab
Prerequisite: None.
Students practice oral communication and
listening skills. Emphasis is on fluency,
correct word usage, and syntax. Topics range
from everyday situations to elementary
abstractions. (Formerly ESL 3.2)

ESL 11 (Not degree applicable)
ESL FUNDAMENTAL
READING SKILLS 1.5 UNITS
Class hours:3 lecture (9 weeks)
Prerequisite: None.
This course is designed for ESL students who
wish to improve in fundamental reading
skills. The emphasis will be on phonics, word
recognition skills, and basic thinking as they
relate to reading.

ESL 12 (Not degree applicable)
ESL PRONUNCIATION 1.5 UNITS
Class hours:3 lecture/1 lab (9 weeks)
Prerequisite: None.
This course aids the students in reproducing
the sounds of American English accurately.
Attention focuses on the individual needs
of the students. This course may be taken for
a maximum of 3 units.

ESL 14 (Not degree applicable)
ACCENT REDUCTION 3 UNITS
Class hours:3 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is an intensive pronunciation course that includes practice with the sounds of American English in all contexts: syllables, words, sentences, and conversation and an in-depth practice of the stress and intona-
tional patterns of American English. Enunciation (production of sounds with clarity and precision) of American English in varying contexts will be stressed. Each student will be evaluated and assisted with his/her pronunciation difficulties. This course may be taken for a maximum of 6 units.

ESL 20 (Not degree applicable)  
ESL SPEAKING AND LISTENING  3 UNITS  
Class hours: 3 lecture/1 lab  
Prerequisite: None.  
Recommendation: ESL 10 or equivalent with a grade of Credit or "C" or higher.  
This course is 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. (Formerly ESL 4.2)

ESL 21A (Not degree applicable)  
ESL INTERMEDIATE VOCABULARY  3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course is for ESL students who wish to improve vocabulary skills. Emphasis is on building vocabulary, dictionary skills, and word recognition skills to be used in everyday language and college courses. Students will be introduced to the most frequently used English words and will also learn how to infer meaning from context. (Formerly ESL 21/ESL 21.1)

ESL 21B (Not degree applicable)  
ESL ADVANCED VOCABULARY  3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course is for advanced ESL students who wish to improve vocabulary skills at a level beyond that of the intermediate. The emphasis is on general and specialized vocabulary development, advanced dictionary skills, word recognition skills, improvement of sight vocabulary, and application of advanced vocabulary in context techniques. (Formerly ESL 21.2)

ESL 22 (Not degree applicable)  
ESL ORAL COMMUNICATION  1.5 UNITS  
Class hours: 3 lecture/1 lab (9 weeks)  
Prerequisite: None.  
This course identifies and improves the production of American speech sounds. Students prepare, practice and present various oral messages. Emphasis is on stress and intonation. Topics center on students' needs and personal experiences. This course may be taken for a maximum of 3 units.

ESL 23 (Not degree applicable)  
ESL SPELLING  1.5 UNITS  
Class hours: 3 lecture/1 lab (9 weeks)  
Prerequisite: None.  
This course introduces basic spelling rules and provides students with the opportunity for practice orally and in writing. Texts and supplemental materials will be used to reinforce the relationship between oral and written expression. This course may be taken for a maximum of 3 units.

ESL 24 (Not degree applicable)  
ESL READING  1.5 UNITS  
Class hours: 3 lecture (9 weeks)  
Prerequisite: None.  
This course improves the literal, interpretive and critical comprehension skills of the students. Emphasis is on identifying main ideas and significant details, sequence of relationships, inferences of fact and tone, figurative language, and propaganda.

ESL 25 (Not degree applicable)  
AMERICAN EXPRESSIONS AND CULTURE  1.5 UNITS  
Class hours: 3 lecture (9 weeks)  
Prerequisite: None.  
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 26 (Not degree applicable)  
ENGLISH FOR SPECIFIC PURPOSES  1.5 UNITS  
Class hours: 3 lecture (9 weeks)  
Prerequisite: None.  
This course is for students who need work in oral and written English skills in their field. It provides an opportunity to become familiar with situations particular to their field. This course may be taken for a maximum of 3 units.

ESL 27 (Not degree applicable)  
EDITING FOR ADVANCED GRAMMAR AND SYNTAX  1.5 UNITS  
Class hours: 3 lecture/1 lab (9 weeks)  
Prerequisite: None.  
Corequisite: None.  
This course is designed for the advanced ESL students in writing courses who need help with grammar trouble spots that cause difficulties in writing. Rather than provide English grammar review, the course concentrates on rules to help the student apply general principles. It will aid in finding ways to examine and evaluate writing in terms of grammatical accuracy. This course may be taken for a maximum of 6 units.

ESL 30 (Not degree applicable)  
INDIVIDUAL ESL TUTORIAL  0 UNIT  
Class hours: 3 lab  
Open entry/open exit  
Prerequisite: None.  
Corequisite: None.  
Recommendation: Enrollment in any Cerritos College course.  
This course assists students in reinforcing, expanding, and improving the skills related to their specific English as a Second Language concerns. The course is taught using diagnostic-prescriptive methods, technology-mediated instruction, and individual and small group instruction.

ESL 31 (Not degree applicable)  
ESL STUDY SKILLS  1.5 UNITS  
Class hours: 3 lecture (9 weeks)  
Prerequisite: None.  
This course is for the student who plans on entering college classes and wants to improve listening skills and learning techniques. Emphasis is on methods for reading textbook efficiently, taking notes, understanding textbook assignments, and preparing for examinations.

ESL 32 (Not degree applicable)  
ESL TUTORIAL  0 UNIT  
Class hours: 3 lab  
Open entry/open exit  
Prerequisite: None.  
Corequisite: None.  
This course provides an opportunity to become familiar with students with ESL related Language Center resources to improve English grammar, idiom and standard usage pursuant to independent work. (Formerly ESL 99)
Announcement of Courses

ESL 100
ESL WRITING AND STRUCTURE 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: Satisfactory completion of the English As A Second Language Placement Process or ESL 3 or equivalent with a grade of Credit or “C” or higher.
This course reviews grammatical structures and differences and similarities between cultures. (Formerly ESL 3.1)
Transfer Credit: UC

ESL 200
ESL WRITING AND STRUCTURE 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: Satisfactory completion of the English As A Second Language Placement Process or ESL 100 or equivalent with a grade of Credit or “C” or higher.
Students study the sentence in context. They learn to eliminate mechanical errors and faulty sentence structure from their writing. Students review grammatical structures and punctuation. They write original paragraphs based on personal experience and on ideas drawn from supplemental materials. (Formerly ESL 4.1)
Transfer Credit: UC

FINANCE
SEE BUSF
(Business Accounting/ Finance)

FRENCH
(Liberal Arts Division)

FREN 101 (CAN FREN SEQ A)(CAN FREN 2)
ELEMENTARY FRENCH 5 UNITS
Class hours: 5 lecture + 1 hr. lab. arr.
Prerequisite: None.
This beginning French course emphasizes listening, speaking, reading and writing and helps to develop the appreciation of cultural diversity through the study of differences and similarities between cultures. (Formerly FREN 1)
Transfer Credit: CSU; UC

FREN 102 (CAN FREN SEQ A)(CAN FREN 4)
ELEMENTARY FRENCH 5 UNITS
Class hours: 5 lecture + 1 hr. lab. arr.
Prerequisite: FREN 101 or equivalent with a grade of Credit or “C” or higher.
This course is a continuation of the study of the basic principles of French with an emphasis on oral and written communication. It helps continue to develop the appreciation of cultural diversity through the study of differences and similarities between cultures. (Formerly FREN 2)
Transfer Credit: CSU; UC

FREN 201 (CAN FREN 8)
INTERMEDIATE FRENCH 5 UNITS
Class hours: 5 lecture + 1 hr. lab. arr.
Prerequisite: FREN 102 or equivalent with a grade of Credit or “C” or higher.
This course provides a review and in-depth study of important grammatical concepts. Reading and interpretation of authentic literary works by French writers are included. Guided and original composition exercises will be assigned as a transition to free written expression. This class is conducted primarily in French. (Formerly FREN 3)
Transfer Credit: CSU; UC

FREN 202 (CAN FREN 10)
INTERMEDIATE FRENCH 4 UNITS
Class hours: 4 lecture
Prerequisite: FREN 201 or equivalent with a grade of Credit or “C” or higher.
This is a course in reading of modern French. Emphasis is placed on oral and written expression. Grammar review is completed. FREN 4 aims to give the student a working knowledge of the language and to form the basis for advanced work in literature or science. (Formerly FREN 4)
Transfer Credit: CSU; UC

FREN 203
INTERMEDIATE FRENCH
ADVANCED LEVEL 1 4 UNITS
Class hours: 4 lecture
Prerequisite: FREN 202 or equivalent with a grade of Credit or “C” or higher.
This course consists of selected intermediate readings in literary and technical French designed to meet requirements of students majoring in literature, science, mathematics and engineering with a minimum basic grammar review. (Formerly FREN 5)
Transfer Credit: CSU; UC

FREN 281
BEGINNING CONVERSATIONAL FRENCH 3 UNITS
Class hours: 3 lecture
Prerequisite: FREN 102 or equivalent with a grade of Credit or “C” or higher.
This course 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. (Formerly FREN 8.1)
Transfer Credit: CSU; UC

FREN 282
INTERMEDIATE CONVERSATIONAL FRENCH 3 UNITS
Class hours: 3 lecture
Prerequisite: FREN 281 or equivalent with a grade of Credit or “C” or higher.
This course provides intensive oral practice in French in the discussion of social, current, and cultural affairs. Emphasis is on the acquisition of special idioms and vocabulary suitable to conversation about current affairs and personal values. This course is primarily conducted in French and is recommended for all French majors. (Formerly FREN 8.2)
Transfer Credit: CSU; UC

FREN 283
ADVANCED CONVERSATIONAL FRENCH 3 UNITS
Class hours: 3 lecture
Prerequisite: FREN 282 or equivalent with a grade of Credit or “C” or higher.
This course provides intensive oral practice in discussion of controversial topics, expressing informed opinions regarding current affairs, the arts, and political issues. Emphasis is on creative development of arguments and analyses. Acquisition of appropriate vocabulary is stressed. This course, conducted completely in French, is recommended for all French majors. (Formerly FREN 8.3)
Transfer Credit: CSU; UC

GEOGRAPHY
(Science/ Engineering/ Math Division)

GEOG 101 (CAN GEOG 2)
PHYSICAL GEOGRAPHY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course covers the causes of variations in weather and climate; how landscapes develop; the use of maps or other tools of a geographer; and the effect of earth motions on the seasons, time, and climate. (Formerly GEOG 1)
Transfer Credit: CSU; UC

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Announcement of Courses

GEOG 102 (CAN GEOG 4)
NATURAL AND CULTURAL GEOGRAPHY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is a survey of the influence of culture and the physical environment on man's activities in major world regions. An examination of the culture, settlement patterns, agriculture, commerce, natural resources and industry of each region will be made. In addition, world trends in population growth and urbanization will be studied. (Formerly GEOG 2)
Transfer Credit: CSU; UC

GEOG 105
WORLD REGIONAL GEOGRAPHY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course investigates the major cultural and political regions of the world today. Emphasis is placed on cultural relationships, land use patterns, population distribution, trade and political alliances. (Formerly GEOG 5)
Transfer Credit: CSU; UC

GEOG 106
INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces the student to Geographic Information Systems (GIS) technology, theory, and software applications. These systems allow organization and analysis of spatial data from a wide variety of academic and business areas. Students will work with data sets from a variety of disciplines, and will learn to retrieve, organize and interpret spatial data applicable to their major or career. (Formerly GEOG 10)
Transfer Credit: CSU

GEOG 257
VIETNAM: COUNTRY AND WAR 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course examines the geographical and historical context of the United States' involvement in Vietnam. The course includes an investigation of the physical geography of Southeast Asia, a geographical study of the indigenous and colonial cultures found in the region, the geopolitical chain of events leading to the commitment of United States ground forces into the region, an examination of the conduct of the war, and an analysis of the legacies of the Vietnam era. This course is not open to students who are enrolled in or who have received credit for HIST 16. (Formerly GEOG 97.1/GEOG 16)
Transfer Credit: CSU

GEOL 100
NATURAL HISTORY OF SO. CALIFORNIA 1 UNIT
(Also listed as BIOL 100)
Class hours: Total of 9 hours lecture with the minimum equivalent of 4 one-day field trips.
Prerequisite: None.
This is a field trip and seminar class in biology and geology of selected areas in So. California. Minerals, geology, landforms, plants, animals, ecology, human use, and recreational value will be studied. This course may be taken for a maximum of 2 units. (Formerly GEOL 16)
Transfer Credit: CSU

GEOL 101 (CAN GEOL 2)
THE EARTH ENVIRONMENT 4 UNITS
Class hours: 3 lecture, 3 lab and the equivalent of 3 one day field trips.
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Math Placement Process or MATH 40 or equivalent with a grade of Credit or “C” or higher.
This course 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. (Formerly GEOL 3)
Transfer Credit: CSU; UC

GEOL 201 (CAN GEOL 4)
EARTH HISTORY 4 UNITS
Class hours: 3 lecture/3 lab
(Spring only)
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course is a general survey of the fields of physical and historical geology. It is designed to give a broad general understanding and appreciation of the composition, structure, geologic processes, origin, and development of the earth and its inhabitants. Included is a present-day practical application of geologic knowledge. (Open to those with credit in GEOL 101.) (Formerly GEOL 10)
Transfer Credit: CSU; UC

GEOL 204
GEOLOGY OF THE WESTERN NATIONAL PARKS AND MONUMENTS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: ENGL 100 clearance and MATH 40 or equivalent with a grade of Credit or “C” or higher.
A study of the geologic processes which shaped selected national parks and monuments of Western North America. (Formerly GEOL 4)
Transfer Credit: CSU

GEOL 207
PALEONTOLOGY, LIFE OF THE PAST 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Math Placement Process or MATH 40 or equivalent with a grade of Credit or “C” or higher.

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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. (Formerly GEOL 7)
Transfer Credit: CSU; UC

GEOL 209
EARTHQUAKES AND VOLCANOES 3 UNITS
Class hours: 2.5 lecture/1.5 lab
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
Corequisite: MATH 60 or equivalent or satisfactory completion of the Math Placement Process.
Recommendation: None.
This course is an introduction to the study of earthquakes and volcanoes including how their origin is explained by the theory of plate tectonics and how new knowledge about them can be applied to the betterment of human welfare. (Formerly GEOL 9)
Transfer Credit: CSU; UC

GERMAN
(Liberal Arts Division)

GERM 101 (CAN GERM SEQ A)(CAN GERM 2)
ELEMENTARY GERMAN 5 UNITS
Class hours: 5 lecture + 1 hr. lab. arr.
Prerequisite: None.
This beginning course emphasizes listening, speaking, reading, and writing, and helps to develop an appreciation of cultural diversity through the study of differences and similarities between cultures. (Formerly GERM 1)
Transfer Credit: CSU; UC

GERM 102 (CAN GERM SEQ A)(CAN GERM 4)
ELEMENTARY GERMAN 5 UNITS
Class hours: 5 lecture + 1 hr. lab. arr.
Prerequisite: GERM 101 or equivalent with a grade of Credit or “C” or higher.
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. (Formerly GERM 2)
Transfer Credit: CSU; UC

GERM 201 (CAN GERM SEQ B)(CAN GERM 8)
INTERMEDIATE GERMAN 4 UNITS
Class hours: 4 lecture
Prerequisite: GERM 102 or equivalent with a grade of Credit or “C” or higher.
This course provides a review and in-depth study of grammatical concepts in the German Language. Reading and interpretation of literary works by German writers, and guided and original compositions are included. This course will further develop the appreciation of cultural diversity. This class is conducted primarily in German. (Formerly GERM 3)
Transfer Credit: CSU; UC

GERM 202 (CAN GERM SEQ B)(CAN GERM 10)
INTERMEDIATE GERMAN 4 UNITS
Class hours: 4 lecture
Prerequisite: GERM 201 or equivalent with a grade of Credit or “C” or higher.
This course provides a continued review and in-depth study of grammatical concepts and reading and interpretation of literary works by writers of German-speaking countries. Guided and original compositions are included. This class, conducted primarily in German, will further develop the appreciation of cultural diversity. (Formerly GERM 4)
Transfer Credit: CSU; UC

GERM 203
SCIENTIFIC GERMAN 4 UNITS
Class hours: 4 lecture
Prerequisite: GERM 202 or equivalent with a grade of Credit or “C” or higher.
This course provides a review of grammatical concepts in the German language and consists of selected intermediate readings of literary and technical German designed to meet requirements of students majoring in literature, science, mathematics and engineering. (Formerly GERM 5)
Transfer Credit: CSU; UC

GERM 204
SCIENTIFIC GERMAN 4 UNITS
Class hours: 4 lecture
Prerequisite: GERM 203 or equivalent with a grade of Credit or “C” or higher.
This course consists of selected intermediate readings of popular appeal in scientific and technical German taken from texts published recently. It includes a basic grammar review. (Formerly GERM 6)
Transfer Credit: CSU; UC

GERM 281
BEGINNING CONVERSATIONAL GERMAN 3 UNITS
Class hours: 3 lecture
Prerequisite: GERM 102 or equivalent with a grade of Credit or “C” or higher.
This course 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. (Formerly GERM 8.1)
Transfer Credit: CSU; UC

GERM 282
INTERMEDIATE CONVERSATIONAL GERMAN 3 UNITS
Class hours: 3 lecture
Prerequisite: GERM 281 or equivalent with a grade of Credit or “C” or higher.
This course provides intensive oral practice in the discussion of current topics, including multi-culturalism in German-speaking countries. Emphasis is on the acquisition of special idioms and vocabulary suitable for conversation about the family, the world of work, business, sports, public transportation and ecology. This course, conducted primarily in German, is recommended for all German majors. (Formerly GERM 8.2)
Transfer Credit: CSU; UC

GERM 283
ADVANCED CONVERSATIONAL GERMAN 3 UNITS
Class hours: 3 lecture
Prerequisite: GERM 282 or equivalent with a grade of Credit or “C” or higher.
This course provides intensive oral practice in discussion of controversial topics, expressing informed opinions regarding current affairs, the arts and political issues. Emphasis is on the acquisition of appropriate vocabulary and language patterns, and the creative development of arguments. This course, conducted in German, is recommended for all German majors. (Formerly GERM 8.3)
Transfer Credit: CSU; UC

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### GERM 291
**GERMAN FOR INTERNATIONAL COMMERCE** 3 UNITS  
Class hours: 3 lecture  
Prerequisite: GERM 102 or equivalent with a grade of Credit or "C" or higher.  
Corequisite: None.  
Recommendation: GERM 201 or equivalent with a grade of Credit or "C" or higher.  
This course will introduce students to the vocabulary used in German business and economy and will give insight into the customs used in the German business world where they differ from American customs.  
(Formerly GERM 9/GERM 9.1)  
Transfer Credit: CSU

### GERM 292
**GERMAN FOR INTERNATIONAL COMMERCE** 3 UNITS  
Class hours: 3 lecture  
Prerequisite: GERM 102 or equivalent with a grade of Credit or "C" or higher.  
Corequisite: None.  
Recommendation: GERM 201 or equivalent with a grade of Credit 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.  
(Formerly GERM 69.5/GERM 9.2)  
Transfer Credit: CSU

### HED 110
**COMMUNITY FIRST AID AND CPR** 3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
This course introduces the skills required to provide basic life support in an emergency illness or injury. The course includes adult, infant, and child CPR and First Aid. Upon successful completion of all tests, students will be issued an American Red Cross card for Community First Aid (3 years) and CPR (1 year).  
(Formerly HED 9)  
Transfer Credit: CSU; UC

### HED 200
**FOOD FOR FITNESS AND PHYSICAL ACTIVITY** 3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course is an introduction to the basic nutritional principles important to physically active individuals. Content will cover the role of food in enhancing exercise and sport performance, body composition, and energy production. Current research and practical activities will be presented. This course is especially applicable for individuals interested in careers related to fitness or athletics.  
Transfer Credit: CSU

### HEALTH OCCUPATIONS
(Health Occupations Division)

### HO 9
**Emergency Medical Technician I** 3 UNITS  
Class hours: 3 lecture  
Prerequisite: Current CPR for Professional Rescuer Certification (minimum of 8 hours)  
Corequisite: HO 9L.  
This course teaches the emergency medical technician the basic knowledge, skills, and attitudes necessary to perform prehospital emergency care service.  
Three major modules will cover basic life support, evaluation for immediate care, and specialized medical problems. A Certificate of Completion is awarded after successful completion of the written and practical examinations. This course may be taken for a maximum of 6 units.  
(Formerly HO 32)  
Transfer Credit: CSU; UC

### HO 53
**Electrocardiography** 1 UNIT  
Class hours: 2 lecture/3 lab (6 weeks)  
Prerequisite: None.  
Corequisite: Current CPR for Professional Rescuer Certification  
Recommendation: None.  
This course will provide the student with knowledge and skills concerning the theoretical and procedural requirements for performing electrocardiography. This course follows the guidelines set forth by both state and national regulations. This course is not open to students who have received credit for MA 43.  
(Formerly HO 10)
**Announcement of Courses**

**HO 54**
**MEDICAL LABORATORY SKILLS** 1 UNIT  
Class hours: 2 lecture/3 lab (6 weeks)  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course will provide the student with knowledge and skills concerning the theoretical and procedural requirements for performing several lab procedures. This course follows 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). This course is not open to students who have received credit for MA 43. (Formerly HO 11)

**HO 55**
**PHLEBOTOMY PROCEDURES** 1 UNIT  
Class hours: 2 lecture/3 lab (6 weeks)  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course will provide the student with knowledge and skills concerning the theoretical and procedural requirements for performing venipuncture and capillary puncture. The student will acquire a background knowledge of blood composition, develop skills in performing basic blood testing, and learn to operate the equipment used in these procedures. The course follows guidelines set forth by both state and national regulations. This course is not open to students who have received credit for MA 43. (Formerly HO 12)

**HO 56**
**MEDICATION CALCULATIONS** 1 UNIT  
Class hours: 2 lecture (9 weeks)  
Prerequisite: MATH 40 or equivalent with a grade of Credit or “C” or higher or successful 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 units. (Formerly NRSG 4)

**HO 151**
**ELEMENTS OF NUTRITION** 2 UNITS  
Class hours: 2 lecture  
Prerequisite: None.  
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. (Formerly HO 51)
Transfer Credit: CSU

**HO 152**
**NORMAL AND THERAPEUTIC NUTRITION** 3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Recommendation: A&P 130 or equivalent with a grade of Credit or “C” or higher.  
This course is an introduction to basic principles of normal and therapeutic nutrition. Emphasis is placed on nutritional requirements and food selection in health and disease. Course content includes life cycle needs, weight maintenance strategies and discussion of common medical disorders and their relation to diet. This course is designed to meet the requirement for dental hygiene and nursing majors. (Formerly HO 52)
Transfer Credit: CSU

**HO 236**
**LIFE SPAN/HEALTH ISSUES 1** 1 UNIT  
Class hours: 2 lecture (9 weeks)  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course presents an application of the concepts and principles of growth and development as they relate to the delivery of health care. Content includes discussion of health concerns and issues at various age levels. Emphasis will be placed upon physical, cognitive and psychosocial assessment of individuals from infancy through school-age. Not open to students who have received credit for HO 15.  
Transfer Credit: CSU

**HO 237**
**LIFE SPAN/HEALTH ISSUES 2** 1 UNIT  
Class hours: 2 lecture (9 weeks)  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course presents an application of the concepts and principles of growth and development as they relate to the delivery of health care. Content includes discussion of health concerns and issues at various age levels. Emphasis will be placed upon physical, cognitive and psychosocial assessment of individuals from adolescence through older adulthood. Not open to student who have received credit for HO 15.  
Transfer Credit: CSU

**HIST 101**
**AMERICAN HISTORY AND CONSTITUTION** 3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Reading Placement Process or READ 43 with a grade of Credit or “C” or higher.  
History 101 is a survey of the history of the United States from pre-colonial times to the present. Major political, social, economic, and cultural factors will be presented focusing on the roles played by the diverse peoples and cultures who shared in the development of United States history. An emphasis may be placed on one or more of these factors. (Formerly HIST 27)
Transfer Credit: CSU; UC

**HIST 110**
**AFRICAN-AMERICAN HISTORY** 3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Reading Placement Process or READ 43 with a grade of Credit or “C” or higher.

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This course is a survey of the political, legal, economic, and social position and role of African-Americans in the history of the United States. Special emphasis will be given to the contributions of African-Americans in all aspects of American culture. (Formerly HIST 35)
Transfer Credit: CSU; UC

HIST 120
HISTORY OF CALIFORNIA 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Credit or "C" or higher and satisfactory completion of the Reading Placement Process or READ 43 with a grade of Credit or "C" or higher.
This course is 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. (Formerly HIST 39)
Transfer Credit: CSU; UC

HIST 201 (CAN HIST SEQ B) (CAN HIST 8)
POLITICAL AND SOCIAL HISTORY OF THE UNITED STATES 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or "C" or higher.
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 7.1)
Transfer Credit: CSU; UC

HIST 202 (CAN HIST SEQ B) (CAN HIST 10)
POLITICAL AND SOCIAL HISTORY OF THE UNITED STATES 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher and satisfactory completion of the Reading Placement Process or READ 43 with a grade of Credit or "C" or higher.
A survey of cultural, diplomatic, economic, ethnic, political and social trends in recent United States history from 1877 to the present, focusing on the roles played by the diverse peoples and cultures who shared in the development of the United States. An emphasis may be placed on one or more of these factors. (Formerly HIST 7.2)
Transfer Credit: CSU; UC

HIST 210
HISTORY OF THE UNITED STATES IN THE POST WORLD WAR II ERA 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of Credit or "C" or higher and satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher.
This 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 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. (Formerly HIST 8.2)
Transfer Credit: CSU; UC

HIST 221
HISTORY OF THE AMERICAS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or "C" or higher.
This course is a study of the histories of the United States, Canada, and the nations of Latin America from the completion of the independence movements to the present. They are studied as an integrated whole focusing on the roles played by the diverse peoples and cultures who shaped their development. Major political, economic, social and cultural factors and issues are presented with emphasis given to emerging international relations within the Western Hemisphere during the nineteenth and twentieth centuries. (Formerly HIST 8.2)
Transfer Credit: CSU; UC

HIST 230
HISTORY OF MEXICO 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher and satisfactory completion of the Reading Placement Process or READ 43 with a grade of Credit or "C" or higher.
This course is an examination of the origins and evolution of the cultural, social, economic and political institutions, trends, events, issues, and leading personalities of Mexican History from the Pre-Columbian period to contemporary society. (Formerly HIST 31)
Transfer Credit: CSU; UC

HIST 241 (CAN HIST SEQ A) (CAN HIST 2)
WESTERN CIVILIZATION 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 with a grade of Credit or "C" or higher.
History 241 is a survey course of the development of Western Civilization from the pre-historic era through the mid-seventeenth century A.D. It focuses on the contributions to this development of ancient Sumer, Egypt, classical Greece, Rome, Christianity, Byzantium, Islam, the Middle Ages, the Renaissance, and the Reformation. It acquaints students with the basic institutions, personalities, documents, and writings of the Western world which have influenced contemporary events. (Formerly HIST 4.1, HIST 240)
Recommendation: Satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of Credit or "C" or higher.
Transfer Credit: CSU; UC

HIST 242 (CAN HIST SEQ A) (CAN HIST 4)
WESTERN CIVILIZATION 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 with a grade of Credit or "C" or higher.
Recommendation: Satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of Credit or "C" or higher.
History 242 is a survey course in the history of modern Europe and the Western world from the mid-seventeenth century to the present. It emphasizes broad economic, social and changing political trends, with special attention given to the role of science, the arts and technology in creating the modern world. (Formerly HIST 4.2, HIST 241)
Transfer Credit: CSU; UC

HIST 245
WORLD CIVILIZATION FROM ANTIQUITY TO 1500 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: READ 54 and ENGL 52 or equivalent with grades of Credit or "C" or higher.
This is a survey course of the roots and development of civilizations in Africa, the Americas, Asia, and Europe from the Neolithic Revolution until the age of European exploration of the Americas (1500). The civilizations of Ancient, Classical, Postclassical, and Early European periods will be studied, emphasizing interaction between civilizations and major cultures. (Formerly HIST 6.1)
Transfer Credit: CSU; UC

HIST 246
WORLD CIVILIZATION FROM 1500 TO THE PRESENT 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: READ 54 and ENGL 52 or equivalent with grades of Credit or "C" or higher.
This is a survey course of the origins of modern world history, tracing both regional histories and global interactions. The root and development of civilizations in Africa, the Americas, Asia, and Europe from the 1500's to the present day will be chronicled. Topics will include: the origins and the role of universal religions; the examination of political, social, and gender structures in relation to economic and demographic development; and the diffusion of culture and technology via migration, commerce and the expanse of empire.
Transfer Credit: CSU; UC

HIST 250
HISTORY OF ENGLAND, GREAT BRITAIN AND THE COMMONWEALTH 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher.
History 250 is a survey course in the history of England, the Commonwealth, 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. (Formerly HIST 5)
Transfer Credit: CSU; UC

HIST 255
HISTORY OF RUSSIA AND THE SOVIET UNION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or "C" or higher.
This course in the history of Russia encompasses a brief introduction to the political, social, economic, and cultural development of the Russians from earliest times to the present with an in-depth emphasis on the twentieth century. Special attention is given to the Bolshevik Revolution, the emergence of Soviet totalitarianism, the collapse of the Soviet Union, and the emergence of the new Russian Republic. (Formerly HIST 20)
Transfer Credit: CSU; UC

HIST 257
VIETNAM: COUNTRY AND WAR 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course examines the geographical and historical context of the United States' involvement in Vietnam. The course includes an investigation of the physical geography of Southeast Asia, a geographical study of the indigenous and colonial cultures found in the region, the geopolitical chain of events leading to the commitment of United States ground forces into the region, an examination of the conduct of the war; and an analysis of the legacies of the Vietnam era. This course is not open to students who are enrolled in or who have received credit for GEOG 16. (Formerly HIST 97.1/HIST 16)
Transfer Credit: CSU

HIST 260
SURVEY OF THE HISTORY OF ASIA 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Credit or "C" or higher.
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 empha-
size institutions such as family, philosophies, religious viewpoints and life style. The post-
18th Century periods will emphasize Western
imperialism in Asia, nationalism, the inde-
pendence movements, and the development
of modern Asian states and societies.
(Formerly HIST 18)
Transfer Credit: CSU; UC

HIST 265
SELECTED PROBLEMS IN CONTEMPORARY ASIAN HISTORY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory completion of
the English Placement Process or ENGL 20 or
equivalent with a grade of Credit or “C” or
higher and satisfactory completion of the
Reading Placement Process or READ 43 with
a grade of Credit or “C” or higher.
This course consists of a study of topical issues
and problems concerning 20th century Asian
history. Emphasis will be placed upon polit-
ical, economic, social and cultural institutions,
western imperialism, Asian nationalism, the
emergence of modern Asian states, interna-
tional relations, and contemporary Asian
societies. (Formerly HIST 19)
Transfer Credit: CSU; UC

HIST 270
SPECIAL TOPICS IN HISTORY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will expand on subjects and themes introduced in the core history
curriculum offerings. Each topic will focus on themes, perspectives and issues of special
interest to students. The specific focus of a particular offering will be decided by the
course instructor and announced in the
Schedule of Classes. (Formerly HIST 50)
Transfer Credit: CSU; UC

HUMANITIES
(Fine Arts/ Communications Division)

HUM 100
THE ART OF BEING HUMAN 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This is an introductory humanities course
which considers the great works of humanity
through the ages in painting, music, architec-
ture, sculpture, dance, literature and
philosophy as they relate to the universal prob-
lems of humankind and today’s students.
Everyone will be encouraged to develop his/her
own doctrine of humanity. (Formerly HUM 1)
Transfer Credit: CSU; UC

HUM 103
HUMANITIES THROUGH THE ARTS 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
This course is a survey of the human condi-
tion as seen through film, drama, music,
literature, painting, sculpture and architecture
with an emphasis on history, techniques,
meaning and evaluation of individual works
of western art. (Formerly HUM 3)
Transfer Credit: CSU

(Humanities/
Social Sciences Division)

HUM 105
ENCOUNTERS WITH LIVING FAITHS 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
This course is a study about man’s religious
experience based on a series of encounters with
men and women of four continents who are
living their faiths now. It focuses on the meaning
of religion for individual people. From
Protestant churches of Indianapolis to the Zen
monasteries of Japan, the course is concerned
with looking beyond the splendid and the exotic
and toward the meaning of religion for indi-
vidual people. (Formerly HUM 4)
Transfer Credit: CSU

INDUSTRIAL ARTS
(Technology Division)

FOR ADDITIONAL COURSES SEE
ELECTRONICS, WOODWORKING
MANUFACTURING TECHNOLOGIES,
AUTOMOTIVE REPAIR, AND PLAS
CUT MANUFACTURING TECHNOLOGY

IA 20 (Not degree applicable)
A SURVEY OF AUTOMATED
MANUFACTURING FOR
NON-TECHNICAL PERSONNEL
(20-Hour Robots) 1 UNIT
Class hours: 4 lecture
(6 weeks)
Prerequisite: None

This course provides an overview of the
current robotics industry, starting with a
brief history and followed by a review of the
basic terms used in the field. The robots are
classified by geometry, power source, applica-
tion, path control, and intelligence. The
operation of different types of end effectors
is covered, along with robot controllers and
the basic system sensors. Programming tech-
niques are covered.

JAPANESE
(Liberal Arts Division)

JAPN 101
ELEMENTARY JAPANESE 5 UNITS
Class hours: 5 lecture + 1 hr. lab.
Prerequisite: None.
This beginning Japanese course emphasizes
listening, reading, writing, and speaking and
helps to develop the appreciation of cultural
diversity through the study of differences and
similarities between cultures. (Formerly JAPN 1)
Transfer Credit: CSU; UC

JAPN 102
ELEMENTARY JAPANESE 5 UNITS
Class hours: 5 lecture + 1 hr. lab.
Prerequisite: JAPN 101 or equivalent with a
grade of Credit or “C” or higher.
This beginning course continues to empha-
size listening, reading, writing, and speaking and
helps to continue to develop the
cultural diversity through the study of differ-
ences and similarities between cultures.
(Formerly JAPN 2)
Transfer Credit: CSU; UC

JAPN 201
INTERMEDIATE JAPANESE 5 UNITS
Class hours: 5 lecture, 1 lab
Prerequisite: JAPN 102 or equivalent with a
grade of Credit or “C” or higher.
This course provides a review and in-depth
study of Japanese grammatical concepts.
Reading and interpretation of literary works
by Japanese writers and guided and original
compositions are included. This course will
further develop the appreciation of cultural
diversity. This class is primarily conducted in
Japanese. (Formerly JAPN 3)
Transfer Credit: CSU; UC

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
JAPN 202
INTERMEDIATE JAPANESE 4 UNITS
Class hours: 4 lecture
Prerequisite: JAPN 201 or equivalent with a grade of Credit or “C” or higher.
This 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. (Formerly JAPN 4)
Transfer Credit: CSU; UC

JAPN 281
BEGINNING CONVERSATIONAL JAPANESE 3 UNITS
Class hours: 3 lecture
Prerequisite: JAPN 102 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
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. (Formerly JAPN 8.1)
Transfer Credit: CSU; UC

JAPN 282
INTERMEDIATE CONVERSATIONAL JAPANESE 3 UNITS
Class hours: 3 lecture
Prerequisite: JAPN 281 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course provides intensive oral practice in the discussion of current topics, including multiculturalism in Japanese-speaking countries. Emphasis is on the acquisition of special idioms and vocabulary suitable for conversation about the family, the world of work, business, sports, public transportation and ecology. This course, conducted primarily in Japanese, is recommended for all Japanese majors. (Formerly JAPN 8.2)
Transfer Credit: CSU; UC

JAPN 283
ADVANCED CONVERSATIONAL JAPANESE 3 UNITS
Class hours: 3 lecture
Prerequisite: JAPN 282 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course provides intensive oral practice in discussion of controversial topics and expressing informed opinions regarding current affairs, the arts, and political issues. Emphasis is on the acquisition of appropriate vocabulary and language patterns, and the creative development of arguments. This course, conducted in Japanese, is recommended for all Japanese majors. (Formerly JAPN 8.3)
Transfer Credit: CSU; UC

JOURNALISM
(Fine Arts/Communications Division)

JOUR 50L
EDITORIAL BOARD 1 UNIT
Class hours: 3 lab
Prerequisite: None.
Corequisite: JOUR 103 or JOUR 105 or JOUR 160L.
Limitation of enrollment: editors of campus media.
Recommendation: None.
This course focuses on leadership aspects using the school newspaper, the Talon Marks, and the school magazine, Wings, as practical laboratories. Enrollments are limited to those named to editor positions of these campus media. This course may be taken for a maximum of 3 units. (Formerly JOUR 59)

JOUR 100
INTRODUCTION TO MASS COMMUNICATIONS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
This course focuses on the impact of the mass media in American culture and society. It teaches the student to be a more discerning consumer of the mass media. Topics include the origin, development, and contemporary role of print, electronic, and new media in shaping the political, economic, and social fabric of society. (Formerly JOUR 4)
Transfer Credit: CSU; UC

JOUR 101
BEGINNING NEWSWRITING AND REPORTING 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher and typing ability.
Corequisite: None.
This course focuses on the principles of newsgathering and newswriting, with emphasis on journalistic writing. Basic news story structure and development, news evaluation, newsgathering methods, interviewing, craftsmanship, and reporting techniques in general are explored. Newspaper and other news and information media are analyzed. The course is particularly recommended for English and communications majors and those planning careers in news media, public relations, communications, corporate communications and news and informational media. (Formerly JOUR 20)
Transfer Credit: CSU; UC

JOUR 103
NEWSPAPER ARTICLE WRITING 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: JOUR 101 or equivalent with a grade of Credit or “C” or higher or concurrent enrollment and satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course focuses on media article writing using the school newspaper, Talon Marks, as a practical laboratory. 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 for a maximum of 8 units. Credit/No Credit option available for non-journalism majors. (Formerly JOUR 53)
Transfer Credit: CSU

JOUR 104
SUMMER NEWSPAPER ARTICLE WRITING 1 UNIT
Class hours: 1 lecture/3 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: JOUR 101 and ENGL 52 or equivalent with grades of Credit or “C” or higher, or concurrent enrollment.
Transfer Credit: CSU

Announcement of Courses

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
This course focuses on media article writing using the school newspaper, the Talon Marks, as a practical laboratory during summer school sessions. Students research, write and edit articles for the school paper as they practice the skills of gathering information from a variety of sources. Students synthesize the stories and prepare them for dissemination. Ethical and legal aspects of communication are also covered. This course may be repeated for a maximum of 3 units. (Formerly JOUR 54) Transfer Credit:CSU

JOUR 105
NEWSPAPER PRODUCTION 2 UNITS
Class hours:1 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: ART 188 or CIS 205 or JOUR 120 or equivalent with a grade of Credit or "C" or higher.
This course uses desktop publishing. World Wide Web publishing and photojournalistic techniques for publishing of information. The school newspaper, Talon Marks, is used as a practical laboratory. Presentation of information in a visual form is emphasized. This course is for page designers, graphic artists, cartoonists and photographers. This course may be taken for a maximum of 8 units. Credit/No Credit option available for non-journalism majors. (Formerly JOUR 55) Transfer Credit:CSU

JOUR 106
SUMMER NEWSPAPER PRODUCTION 1 UNIT
Class hours:1 lecture/3 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: ART 188, CIS 205, JOUR 120 or equivalent with grades of Credit or "C" or higher.
This course uses desktop publishing. World Wide Web publishing and photojournalistic techniques for publishing information to produce the school newspaper, the Talon Marks, during the summer session. Presentation of information in a visual form is emphasized. This course is for page designers, graphic artists, cartoonists, and photographers. This course may be repeated for a maximum of 3 units. (Formerly JOUR 56) Transfer Credit:CSU

JOUR 110
PRINCIPLES OF PUBLIC RELATIONS 3 UNITS
Class hours:3 lecture
Prerequisite: None.
This class explores the basic theories and principles of communicating information and concepts. Emphasis is on techniques and methods, with attention given to identifying audiences, using public relations tools, planning public relations programs and campaigns, promoting favorable relations with various segments of the public, and dealing with problem solving. The effective use of public information, publicity, and advertising is covered. (Formerly JOUR 60) Transfer Credit:CSU

JOUR 120
INTERNET FOR JOURNALISTS 2 UNITS
Class hours:2 lecture
Prerequisite: CIS 121 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
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 online news and journalistic web pages. This course may be taken for a maximum of 8 units. (Formerly JOUR 23) Transfer Credit:CSU

JOUR 130
PHOTO JOURNALISM 3 UNITS
Class hours:3 lecture
Prerequisite: PHOT 100 or equivalent with a grade of Credit or "C" or higher.
This course deals with the photographer as a 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 35 mm camera. (Formerly JOUR 32) Transfer Credit:CSU

JOUR 160L
COLLEGE MAGAZINE PRODUCTION 1 UNIT
Class hours:3 lab
Prerequisite: JOUR 101 or equivalent with a grade of Credit or "C" or higher.
Corequisite: JOUR 103 or JOUR 105.

This course offers study and practical experience in planning content and layout, and in editing the college magazine, Wings. It provides a format for the application of photojournalism and feature article writing skills. This course may be taken for a maximum of 8 units. (Formerly JOUR 60) Transfer Credit:CSU

JOUR 170
BROADCAST NEWS 1 UNIT
Class hours:1 lecture/3 lab (9 weeks)
Prerequisite: Concurrent enrollment or completion of JOUR 101 with a grade of Credit or "C" or higher.
Recommendation: Concurrent enrollment or completion of JOUR 130 and/or concurrent enrollment or completion of TH 152.
This nine-week course focuses on broadcast newswriting and production techniques using the college radio station, KCEB, as a practical laboratory. Students will develop and research story ideas for regular news broadcasts KCEB. Newsgathering and reporting for broadcast will be emphasized, along with ethics and legal aspects of communication. This course may be taken for a maximum of 4 units. (Formerly JOUR 70) Transfer Credit:CSU

JOUR 201
ADVANCED REPORTING AND EDITING 3 UNITS
Class hours:3 lecture
Prerequisite: JOUR 101 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
This course covers advanced theory and practice in newswriting and reporting with emphasis on handling of news, editing complex stories, copyreading, headline writing, opinion writing, news release writing, sports feature writing, news release writing, and writing news for World Wide Web presentation. (Formerly JOUR 21) Transfer Credit:CSU;UC

JOUR 220
FEATURE ARTICLE WRITING 3 UNITS
Class hours:3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher, and typing ability.
This course covers non-fiction writing for newspapers and magazines, including a study of story types, sources, methods, and markets. Individualized styles and approaches will be studied. (Formerly JOUR 22) Transfer Credit:CSU
LIBRARY
(Learning Resource Center)

LIBR 100
INTRODUCTION TO LIBRARY RESOURCES 1 UNIT
Class hours: 1 lecture/1 lab arranged
Prerequisite: None.
This is an open-entry, open-exit, self-paced course which emphasizes the use of library methods and materials that will enable students to locate information for course-related study and research. This course is of special value to those students intending to transfer to four-year institutions. This course is to be offered on a credit/no credit basis. (Formerly LIBR 10)
Transfer Credit: CSU/UC

MACHINE MOLDMAKING FOR PLASTICS
(Technology Division)

MMP 50
FUNDAMENTALS OF MACHINE MOLDMAKING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course will provide the student with an understanding of the process of making molds for the plastics industry using machine tooling. The basic concepts of machine tools, the design and construction of molds and mold materials, and machining fundamentals pertaining to standard shop practice will be included. (Formerly MMP 21)

MMP 51
INJECTION AND EXTRUSION MOLDS 3 UNITS
Class hours: 3 lecture
Prerequisite: MMP 50 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
This is a course in the theory and application of the making of injection and extrusion molds. It will cover in-depth hot runner systems, ejection systems, slide mechanisms, and control systems. This course should be taken concurrently with machine tool classes to provide laboratory experiences. (Formerly MMP 31)

MMP 52
COMPRESSION, TRANSFER AND VACUUM FORMING MOLDS 3 UNITS
Class hours: 3 lecture
Prerequisite: MMP 50 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
The student taking this course in conjunction with machine tool courses will be able to design, manufacture, inspect, and install for trial runs the less complicated molds used in injection, compression, transfer, extrusion and vacuum forming processes. (Formerly MMP 32)

MACHINE TOOL TECHNOLOGY
(Technology Division)

MTT 1L (Not degree applicable)
NUMERICAL CONTROL SPECIALTY 1 UNIT
Class hours: 3 lab
Prerequisite: MTT 170 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
This course is designed to give the student a complete understanding of computer numerical control machining. Students will learn how to load programs, align fixtures, and run first article parts. (Formerly CNC 46/MTT 46)

MTT 50
CNC SHOP MATH 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to teach the student how to solve typical and practical mathematical shop problems using a calculator and The Machinists Handbook. Particular emphasis will be placed on solving problems of ratio and proportion, measurement system conversion, plane geometry, and right triangles as applied to machine fabricated parts. (Formerly CNC 9/MTT 9)

MTT 51
CAD/CAM INTRODUCTION 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: MTT 170 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course will prepare students to operate CAM Programming Systems in conjunction with various multi-axis computer numerical control machinery. Students will learn to create and import CAD geometry, create proper job plans, and input into CNC machinery for making parts as a training demonstrator for actual CAD/CAM projects. (Formerly CNC 52/MTT 52)

MTT 52
SETUP AND OPERATION OF CNC MACHINERY 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course instructs in the safe and accurate setup and production operation of computer numerical control machining. Students will learn how to load programs, align fixtures, select offsets, and run first article parts. (Formerly CNC 17/MTT 17)

MTT 53L
MACHINIST LABORATORY 0.5 UNITS
Class hours: 4 lab (9 weeks)
Prerequisite: MTT 62 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is designed to apply acquired skills and knowledge in machining with the lathe, mill, drill press, grinder, and inspection devices and other machines and devices associated with the machine shop environment. (Formerly MTT 18)

MTT 55
SUPPLEMENTAL MACHINE SHOP STUDIES 2 UNITS
Class hours: 4 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to give the student machinist knowledge of blueprint reading, metallurgy, metrology, tooling, and use of the Machinery’s Handbook. (Formerly MTT 19)

MTT 56
CNC SHOP INSPECTION 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: MTT 54 or equivalent with a grade of Credit or “C” or higher or concurrent enrollment.
Corequisite: None.
Recommendation: None.
This course is designed to give the student a complete understanding of metrology and to develop skills in using all of the instruments available in the shop for validation of part geometry. (Formerly CNC 7/MTT 7)

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

250
This course is designed to instruct the student in the use of CNC and CAD/CAM to produce injection molds. Students will call upon design knowledge gained in the PMT 22 course and apply it to fabrication of tooling. An injection mold design from PMT 22 will be processed and fabricated. (Formerly CNC 62/MTT 62)

MTT 100
MACHINE TOOL INTRODUCTION 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed as a survey of machine tool technology and introduction to computerized controls. It will include the computer as a control mechanism in the modern machine shop and also stress traditional machine tool technologies. It includes set-up and operation of basic machine tools, speeds and feeds, measurements, and introduction to the theory of computer numerical control. This course is required for Computer Numerical Control majors and other designated technology programs. (Formerly CNC 1/MTT 1)
Transfer Credit: CSU

MTT 170
COMPUTER NUMERICAL CONTROL PROGRAMMING 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: MTT 50 and MTT 100 or equivalent with grades of Credit or “C” or higher or concurrent enrollment, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course is a survey of the knowledge and skills that allow a person to work with hazardous materials in compliance with governmental regulations while at the same time to protect human health and the environment. Specific examples will include industry specific compliance, regulations, and controls. This includes an introduction to Material Safety Data Sheets (MSDS) and basic materials handling as is typical in local industries. (Formerly MFGT 12/MFGT 30)
Transfer Credit: CSU

MFGT 50
HAZ-MAT 1.5 UNITS
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to instruct the student in the use of CNC and CAD/CAM to produce injection molds. Students will call upon design knowledge gained in the PMT 22 course and apply it to fabrication of tooling. An injection mold design from PMT 22 will be processed and fabricated. (Formerly CNC 62/MTT 62)

Announcement of Courses

MANUFACTURING TECHNOLOGY
(Technology Division)

MFGT 43/44 (Not degree applicable)
MANUFACTURING TECHNOLOGY OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Manufacturing Technology work experience 73 or 20 hours of employment per week for Manufacturing Technology work experience 74. The employment must be in a job related to the student’s educational goal.
Corequisite: (1) Enrollment in the Manufacturing Technology vocational program with 7 or more units including
Announcement of Courses

MFGT 51
INTRODUCTION TO COMPUTER INTEGRATED MANUFACTURING (CIM)  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course introduces 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. (Formerly MFGT 73/74)

MFGT 52
INTRODUCTION TO LASER CUTTING TECHNOLOGY  2 UNITS
Class hours: 2 lecture
Prerequisite: None.
This introductory laser cutting technology class will cover a variety of subjects, starting with an explanation of the laser itself and its history. Discussions will be held on the interface of a laser with material movement system, the different types of systems in the field, and the process required to process materials. Demonstrations and visitation(s) to local industry sites are included. (Formerly MFGT 69.7/MFGT 50)

MFGT 53
STATISTICAL PROCESS CONTROL (SPC)  1.5 UNITS
Class hours: 3 lecture  (9 weeks)
Prerequisite: None.
Corequisite: None.

MFGT 54
ULTRASONIC LEVEL I TESTING  1.5 UNITS
Class hours: 3.5 lecture/1 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides students with background knowledge in the operation of basic ultrasonic testing equipment. Skill development required in understanding and operating basic ultrasonic testing equipment for the inspection of composite and metallic components is emphasized. (Formerly MFGT 36)

MFGT 55
QUALITY CONTROL (QC)  1.5 UNITS
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides basic and comprehensive details of quality control concepts for those new to or already in the manufacturing field. Areas covered include quality costs, product liability, reliability and acceptance sampling. Techniques of using production charts, graphs and tables are covered to emphasize quality improvement with manufacturing sampling. Actual case studies and current manufacturing quality issues and concerns will be 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. (Formerly MFGT 11)

MFGT 56
ISO 9000 QUALITY STANDARDS  1.5 UNITS
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This survey course is a study of ISO 9000, the quality standard established by the International Standard Organization, as it applies to the manufacturing industry. Materials covered will include the ISO 9000 documents and selected references on the topic. Special emphasis will be placed on the advantages of implementing an ISO 9000 Quality System in an industrial manufacturing environment. (Formerly MFGT 12)

MFGT 57
TOTAL QUALITY MANAGEMENT (TQM)  1.5 UNITS
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This survey course examines the nature and application in manufacturing of Total Quality Management (TQM) in today's competitive environment. Students will be introduced to basic concepts of quality and why its philosophy of continuous improvement will provide the framework for production systems. The "team" approach to all facets in quality of production within industry is examined. (Formerly MFGT 13)

MFGT 58
BENCHMARKING  1.5 UNITS
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
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. (Formerly MFGT 15)

MFGT 59
DESIGN OF EXPERIMENTS (DOE)  1.5 UNITS
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This survey course is designed for manufac-

All courses on this page are Title V Associate Degree applicable credit courses unless otherwise noted.

252
MATH 20 (Not degree applicable)
BASIC MATHEMATICS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course includes a review of the basic mathematics skills and fundamental operations as applied to whole numbers, common fractions, decimal fractions, percentage, and ratios. (Formerly MATH 50)
This course may be taken in Programmed Learning Sections. See your counselor for details.

MATH 20T (Not degree applicable)
INDIVIDUALIZED MATHEMATICS FOR BASIC MATHEMATICS 0 UNIT
Class hours: 3 lab (17 weeks)
Open entry/open exit
Prerequisite: None.
Corequisite: MATH 20
Recommendation: None.
This is an individualized math tutorial intended for students entering Basic Mathematics, MATH 20. This course will enable students to expand and improve the skills needed in MATH 20. Math assignments are selected according to a student's needs and learning style. Individualized math instruction will be delivered through computer assisted instruction, development of a personalized math study system for each student, individual tutoring, and meetings with the instructor to evaluate student progress.

MATH 40 (Not degree applicable)
SURVEY OF MATHEMATICS 4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 20 or equivalent with a grade of Credit or "C" or higher or satisfactory completion of the Math Placement Process.
Corequisite: None.
Recommendation: None.
This course investigates topics in pre-algebra and informal geometry from an applications perspective. It emphasizes the use of calculators, problem solving techniques, measurement, formulas, graphs, charts and tables, data collection, probability and statistics, ratios and proportions, scale drawing, as they apply to various careers and technical occupations in business and industry. It will include hands-on lab activities. This course will satisfy the prerequisite for entry into MATH 60. (This course is not open to students with credit in MATH 40.)

MATH 60 ELEMENTARY ALGEBRA 4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 40 or MATH 42 or equivalent with a grade of Credit or "C" or higher or satisfactory completion of the Math Placement Process.
This course is designed for students with a deficiency in high school algebra. Topics included are: real numbers, polynomials, rational expressions, first-degree equations and inequalities, graphs of equations, linear systems of equations, exponents and radicals, and quadratic equations. (Formerly MATH 30)

MATH 60T INDIVIDUALIZED MATHEMATICS FOR ELEMENTARY ALGEBRA 0 UNIT
Class hours: 3 lab (17 weeks)
Open entry/open exit
Prerequisite: None.
Corequisite: MATH 60
Recommendation: None.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
This is an individualized math tutorial intended for students entering Elementary Algebra, MATH 60. This course will enable students to expand and improve the skills needed in MATH 60. Math assignments are selected according to a student’s needs and learning style. Individualized math instruction will be delivered through computer-assisted instruction, development of a personalized math study system for each student, individual tutoring, and meetings with the instructor to evaluate student progress.

**MATH 70**
**PLANE GEOMETRY** 4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 60 or equivalent with a grade of Credit or “C” or higher or satisfactory score on Intermediate Algebra Readiness Test. May be taken concurrently with MATH 80, MATH 80A or MATH 80B.
This course includes the study of triangles, quadrilaterals, circles, parallelograms, and similar figures. Skill development involving equations, 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. (Formerly MATH 32)

**MATH 80**
**INTERMEDIATE ALGEBRA** 4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 60 or equivalent with a grade of Credit or “C” or higher, or satisfactory completion of the Math Placement Process.
This course explores the representation of functions and relations as graphs, formulas, and tables. The types of functions studied will include linear, quadratic, polynomial, rational, exponential, and logarithmic. These functions will be used in solving a variety of equations, systems of equations and applications. 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) (Formerly MATH 23)

**MATH 80A**
**INTERMEDIATE ALGEBRA I** 3 UNITS
Class hours: 3 lecture
Prerequisite: MATH 60 or equivalent with a grade of Credit or “C” or higher.
Students who have not taken MATH 60 must attain a satisfactory score on the Intermediate Algebra Readiness Test.

This course is the first half of Intermediate Algebra. Topics include: the real number system, linear and quadratic equations, inequalities, exponents and polynomials, rational expressions, radical expressions and radicals, and graphing linear equations. (Formerly MATH 23.1)

**MATH 80B**
**INTERMEDIATE ALGEBRA II** 3 UNITS
Class hours: 3 lecture
Prerequisite: MATH 80A or equivalent with a grade of Credit or “C” or higher.
This course is the second half of Intermediate Algebra. Topics include: systems of equations, relations and functions, exponential and logarithmic functions, conic sections, and sequences and series. (Formerly MATH 23.2)

**MATH 80T**
**FOR INTERMEDIATE ALGEBRA** 0 UNIT
Class hours: 3 lab (17 weeks)
Open entry/open exit
Prerequisite: None.
Recommendation: None.
This is an individualized math tutorial intended for students entering Intermediate Algebra, MATH 80. This course will enable students to expand and improve the skills needed in MATH 80. Math assignments are selected according to a student’s needs and learning style. Individualized math instruction will be delivered through computer-assisted instruction, development of a personalized math study system for each student, individual tutoring, and meetings with the instructor to evaluate student progress.

**MATH 100**
**LIBERAL ARTS MATHEMATICS** 3 UNITS
Class hours: 3 lecture
Prerequisite: MATH 80 (or MATH 80B) and MATH 70 or equivalent with grades of Credit or “C” or higher.
This 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 concepts 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. (Formerly MATH 6/MATH 6.1)
Transfer Credit: CSU

**MATH 105**
**ACTIVITY-BASED PROBABILITY AND STATISTICS FOR ELEMENTARY AND MIDDLE SCHOOL TEACHERS** 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: MATH 70, MATH 80 or MATH 80B or equivalent with grades of Credit or “C” or higher.
Recommendation: None.
This course will emphasize activities-based explorations of randomization, data representation, measures of central tendency, and dispersion. Coursework includes combinations, basic probability, and analysis of experiments requiring hypothesizing, experimental design and data gathering. Algebraic thinking will be used throughout the course. Transfer Credit: CSU

**MATH 110A**
**MATHEMATICS FOR ELEMENTARY TEACHERS** 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: MATH 80 (or MATH 80B) and MATH 70 or equivalent with grades of Credit or “C” or higher.
This course is an introduction to problem solving processes and strategies. Topics will include the development and analysis of the structure of and operations on the real number system and concepts 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. (Formerly MATH 6/MATH 6.1)
Transfer Credit: CSU

**MATH 110B**
**MATHEMATICS FOR ELEMENTARY TEACHERS** 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: MATH 80 (or MATH 80B) and MATH 70 or equivalent with grades of Credit or “C” or higher.
This course is a continuation of MATH 110A. Emphasis will be problem solving with a focus on making tables and patterns, 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. (Formerly MATH 6.2)
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
MATH 112
ELEMEN TARY STATISTICS  4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 80 or MATH 80B or equivalent with a grade of Credit of "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. (Formerly MATH 12)
Transfer Credit: CSU; UC

MATH 114
COLLEGE ALGEBRA  4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 80 or MATH 80B or equivalent with a grade of Credit of "C" or higher.
This course 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. (Formerly MATH 16)
Transfer Credit: CSU; UC

MATH 115
FINITE MATHEMATICS  4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 80 or MATH 80B or equivalent with a grade of Credit of "C" or higher.
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. (Formerly MATH 15)
Transfer Credit: CSU; UC

MATH 116
CALCULUS FOR MANAGERIAL, BIOLOGICAL AND SOCIAL SCIENCES  4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 114 or equivalent with a grade of Credit of "C" or higher.
This course is a survey of calculus designed to meet lower division university and four-year college requirements for the management, biology or social science major student. Topics included are differentiation and integration of algebraic, logarithmic and exponential functions of single and multiple variables, related rates, areas, and curve sketching. This course is not open to students with credit in MATH 170. The class does not meet the prerequisite for Mathematics 190. (Formerly MATH 16)
Transfer Credit: CSU; UC

MATH 140
TRIGONOMETRY  3 UNITS
Class hours: 3 lecture
Prerequisite: MATH 80 (or MATH 80B) and MATH 70 or equivalent with grades of Credit or "C" or higher.
This course is an introduction to modern mathematical software commonly used in universities and industry. The topics will be specifically selected to enhance and augment MATH 150 Precalculus Mathematics course using the powerful numeric, symbolic, and graphical capabilities of the mathematical software and will better prepare students for calculus. (Formerly MATH 75.1)
Transfer Credit: CSU

MATH 150
FOR PRECALCULUS  1 UNIT
Class hours: 3 lab
Prerequisite: MATH 150 or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
Corequisite: None.
Recommendation: None.
This course is an introduction to modern mathematical software as used in most universities and in industrial applications where scientific research is commonplace. The topics will be specifically selected to enhance Calculus using the powerful numeric, symbolic and graphical capabilities of the mathematical software that is currently available. (Formerly MATH 75.2)
Transfer Credit: CSU
MATH 190 (CAN MATH SEQ B & C)(CAN MATH 20)  
ANALYTIC GEOMETRY AND CALCULUS II  4 UNITS  
Class hours: 4 lecture  
Prerequisite: MATH 170 or equivalent with a grade of Credit or “C” or higher.  
This course is a continuation of MATH 170. Topics include analytic geometry of the plane, differentiation and integration of trigonometric, logarithmic, and exponential functions, techniques of integration with applications, sequences, series, and improper integrals. (Formerly MATH 5.3/MATH 103)  
Transfer Credit: CSU; UC

MATH 190A  
COMPUTER APPLICATIONS FOR CALCULUS II  1 UNIT  
Class hours: 3 lab  
Prerequisite: MATH 190 or equivalent with a grade of Credit or “C” or higher, or concurrent enrollment.  
Corequisite: None.  
Recommendation: None.  
This course is an introduction to modern mathematical software commonly used in universities and industry. The topics will be specifically selected to enhance Calculus II using the powerful numeric, symbolic, and graphical capabilities of the mathematical software. (Formerly MATH 75.3)  
Transfer Credit: CSU

MATH 220 (CAN MATH SEQ C)(CAN MATH 22)  
ANALYTIC GEOMETRY AND CALCULUS III  4 UNITS  
Class hours: 4 lecture  
Prerequisite: MATH 190 or equivalent with a grade of Credit or “C” or higher.  
This course is a continuation of MATH 190. Topics include vectors and vector calculus, solid analytic geometry, functions of two or more variables, partial derivatives and multiple integration. (Formerly MATH 5.4)  
Transfer Credit: CSU; UC

MATH 240  (CAN MATH 24)  
CALCULUS AND DIFFERENTIAL EQUATIONS  4 UNITS  
Class hours: 4 lecture  (Spring only)  
Prerequisite: MATH 190 or equivalent with a grade of Credit or “C” or higher.  
Recommended: MATH 220 or equivalent with a grade of Credit or “C” or higher.  
Topics in the course are standard methods of solving ordinary linear differential equations with applications. Laplace transforms including techniques of solving differential equations with Laplace transforms, matrices, and determinants including solving systems of linear equations with the Gauss elimination technique and Cramer’s Rule. This course is designed for engineering majors. (Formerly MATH 5.5)  
Transfer Credit: CSU; UC

MA 60  
INTRODUCTION TO MEDICAL ASSISTING  2 UNITS  
Class hours: 2 lecture  
Prerequisite: None.  
This is an introductory course to study the history of medicine and paramedical professions. Generalized and specialized careers in medical assisting, personal and professional responsibilities, medical ethics and law, communications and records are discussed. The focus is on front office responsibilities, customer service philosophy, and basic communication skills. (Formerly MA 40)  
Corequisite: None.

MA 62  
MEDICAL INSURANCE AND LIABILITY  3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Recommendation: MA 161 or equivalent with a grade of Credit or “C” or higher.  
This course presents principles of insurance, general health and accident insurance programs and billing procedures, government medical care programs with specialized billing procedures, role of the insurance officer, and aspects of related medical professional liability. (Formerly MA 42)  
Corequisite: None.

MA 64  
MEDICAL OFFICE ASSISTING  3 UNITS  
Class hours: 2 lecture/3 lab  
Prerequisite: None.  
This course includes instruction in developing skills and techniques in the assisting of physical examinations, naming, care and setting-up of equipment, sterilization, and operating room procedures. (Formerly MA 44)  
Corequisite: None.

MA 66  
MEDICATIONS AND SPECIALTIES  3 UNITS  
Class hours: 2 lecture/3 lab  
Prerequisite: None.  
This course prepares the student to prepare and administer medications, maintain narcotic control records, and assist the specialist with examinations. This course meets the requirements as set forth in the laws relating to the utilization of medical assistants within the Medical Practice Act. (Formerly MA 46)  
Corequisite: None.
This course is an introduction to the study of metals with an emphasis on the effects of welding on metals. The course is applicable for those students seeking a career in welding inspection. The structure of matter, chemical, physical, and mechanical properties of metals, principles of alloying, solid state diffusion, plastic deformation, and heat treatment will be studied. The course will include demonstrations and exercises in the use of metallurgical testing equipment and tools found in the industry. (Formerly MET 48)

**MET 52L**

**METALLURGY SPECIALTY LAB 0.5 UNITS**
Class hours: 3 lab (9 weeks)
Prerequisite: Concurrent enrollment in or completion of MET 100A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is a lab course to complement other courses in the metallurgy curriculum. It is designed to give the student practical laboratory experience in working with ferrous and nonferrous metals. This course may be taken for a maximum of 2 units. (Formerly MET 19)

**MET 53**

**FERROUS METALLURGY 3 UNITS**
Class hours: 2.5 lecture/1.5 lab
Prerequisite: MET 100 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is the study of the entire spectrum of steel and alloy steels. Theory and application in the fields of automotive, construction, aircraft metals, manufacturing and their processes will be covered. In addition, high temperature, heat resistant, corrosion resisting, stainless steel, specialty steels and tool steel will be discussed. The course will also cover testing methods such as metallurgical processing affecting microstructure, physical and mechanical properties including selection of steel types for specific applications, toughness, hardness, strength and heat treatment. (Formerly MET 12)

**MET 54**

**NONFERROUS METALLURGY 3 UNITS**
Class hours: 2.5 lecture/1.5 lab
Prerequisite: MET 100A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is the study of nonferrous metals and alloys. Theory and applications in the field of automotive, corrosion, manufacturing and aircraft metals and their processes will be covered. Materials covered will include titanium, aluminum, brass, bronze, copper, zinc, tin, lead, magnesium, tantalum, niobium, molybdenum, platinum, gold and silver. Emphasis will be placed on the study of properties, fabrication, testing, castings, forgings, powder metals and the unique applications of each material. The metallurgical characteristics and selection of nonferrous types for specific applications will be emphasized. (Formerly MET 22)

**MET 55**

**LABORATORY PROCEDURES 1 UNIT**
Class hours: 2 lecture/2 lab (9 weeks)
Prerequisite: MET 100A or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course will provide instruction in the elements of laboratory procedures of metals. Instruction will include the laboratory procedures used to determine the interpretive concepts of the quality and properties of metals and their alloys, with emphasis placed on the proper use and care of laboratory equipment, hardness testers, abrasive cut-off wheels, mounting presses, tensile testers and polishing equipment used in industry. (Formerly MET 31)

**MET 56**

**SURVEY OF NONFERROUS HEAT TREAT 1.5 UNITS**
Class hours: 3 lecture/1 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces the student to the effects of heat treating as related to the mechanical and physical properties of nonferrous metals. Laboratory testing, including the techniques, processes and equipment used in the industrial heat treating facility, relationship of metallic phases, and precipitation hardening will be emphasized. Theory and application of photomicrography, photomacrography, and the effects of heat treatment on microstructures are included. (Formerly MET 41)

**MET 73/74**

**METALLURGY OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS**
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Metallurgy work experience 73 or 20 hours of employment per week for
Metallurgy work experience 74. The employment must be in a job related to the student's educational goal.

Corequisite: (1) Enrollment in the Metallurgy vocational program with 7 or more units including occupational work experience.

Work experience/career internship provides the opportunity for Metallurgy students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to the major and job skills must be completed on the job/training site. These courses may be taken for a maximum of 15-16 units.

MET 100A  
METALLURGY I 3 UNITS  
Class hours: 3 lecture/lab  
Prerequisite: None.  
This course is an introduction to the study of metals and non-metals; structure of matter; chemical, physical and mechanical properties of metals and alloys; and non-metals including polymers, ceramics and composite materials. Principles of alloying, solid state allotropy, plastic deformation and heat treatment will also be studied. The course will also include demonstrations and laboratory practice in the use of metallurgical testing equipment commonly used in industry. (Formerly MET 10) Transfer Credit: CSU

MET 100B  
METALLURGY II 2.5 UNITS  
Class hours: 2 lecture/lab  
Prerequisite: MET 100A or equivalent with a grade of Credit or "C" or higher.  
This course is designed to further student's skills in the study of the select spectrum of ferrous and nonferrous alloys, such as steel, steel alloys, copper alloys, nickel alloys, titanium and aluminum. Emphasis will be placed on the application of metallurgy principles, properties and laboratory practices. (Formerly MET 12)

MET 120  
NON-DESTRUCTIVE TESTING 3 UNITS  
Class hours: 3 lecture/lab  
Prerequisite: None.  
This is a survey course designed to familiarize the student with nondestructive testing theory and applications. The major emphasis is on the "basic five" nondestructive testing methods: liquid penetrant, magnetic particle, radiographic, ultrasonic, and eddy current. Students will learn to use these methods and to evaluate available NDT methods as they apply to quality control. (Formerly MET 38) Transfer Credit: CSU

MET 130A  
HEAT TREATMENT OF IRON AND STEEL 2 UNITS  
Class hours: 1 lecture/3 lab  
Prerequisite: MET 100A or equivalent with a grade of Credit or "C" or higher.  
Effects of heat treating on mechanical and physical properties of ferrous metals will be covered. Techniques, processes and equipment used in the industrial heat treating facility are included in this course. Processes and effects of specialized surface treatments, theory and application of thermocouples in pyrometry, photomicrography and photomacrography of the effects of heat treatment on microstructures are all part of lecture and lab assignments. (Formerly MET 42/MET 42:1) Transfer Credit: CSU

MICROBIOLOGY  
(Science/Engineering/Math Division)  
(CAN BIOL 14)  
MICR 200  
PRINCIPLES AND APPLICATIONS OF MICROBIOLOGY 5 UNITS  
Class hours: 3 lecture/6 lab  
Prerequisite: CHEM 100 or BIOL 120 or ZOOL 120 or equivalent with grades of Credit or "C" or higher.  
Through lecture and laboratory exercises, this course provides an introduction to the microbial world. Emphasis is on microbial structure, microbial genetics, host-microbe interactions, the immune response, and disease control/prevention. Current issues in acquired immune deficiency syndrome research and recombinant deoxyribonucleic acid technology are discussed. Laboratory exercises will emphasize microbial morphology and identification through microscopic observation and biochemical testing. This course satisfies the requirements of majors in two and four-year nursing programs, dental hygiene, and is recommended for pre-professional biology majors. (Formerly MICR 1) Transfer Credit: CSU; UC

MULTIMEDIA  
SEE ART  
(Art and Design)

MUSIC  
(Fine Arts/Communications Division)  
HISTORY AND APPRECIATION  
MUS 100  
MUSIC APPRECIATION 3 UNITS  
Class hours: 3 lecture, plus 1 hour lab arranged.  
Prerequisite: None.  
This course is an introductory survey of Western Art music from the Middle Ages to the present. Emphasis is on the historical, aesthetic, and cultural contexts from which music arises. (Formerly MUS 7) Transfer Credit: CSU; UC

MUS 101  
INTRODUCTION TO WORLD MUSIC 3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course is an introduction to world music. Emphasis is placed on understanding the substantive features of music as well as social, cultural, political, and economic factors that contribute to different musical traditions found throughout the world. Transfer Credit: CSU; UC

MUS 102  
LATINO MUSIC 3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course offers students a historical and philosophical survey of Latino music. Musical expression will be discussed in terms of folk/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. (Formerly MUS 97.1/MUS 3) Transfer Credit:CSU;UC

MUS 103
JAZZ IN AMERICA 3 UNITS
Class hours: 3 lecture, plus 1 hour lab arranged.
Prerequisite: None.
This course is an introduction to jazz, its historical background and its development in the United States. (Formerly MUS 4) Transfer Credit:CSU;UC

MUS 104
AMERICAN POPULAR MUSIC 3 UNITS
Class hours: 3 lecture, plus 1 hour lab arranged.
Prerequisite: None.
This course is a survey of the history and characteristics of the music developed in or for general American culture and various subcultures from the Revolutionary Period to the present. It includes folk music, blues, Swing-era music, rock ‘n’ roll, and rock. (Formerly MUS 5) Transfer Credit:CSU;UC

MUS 104B
HISTORY OF ROCK MUSIC 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
This course introduces students to rock and its influence on American popular music. The students will learn how to actively engage with music by relating rock to other styles of music, relating music to text, and relating rock to its cultural context.
Transfer Credit:CSU;UC

MUS 105
MUSIC FUNDAMENTALS 3 UNITS
Class hours: 3 lecture, plus 1 hour lab arranged.
Prerequisite: None.
This course provides the fundamentals of notation, meter, rhythm, intervals, and key signatures, so that the student can gain a sensitivity to, and understanding of, music past, present, and future. (Formerly MUS 10) Transfer Credit:CSU;UC

MUS 106
MUSIC THEORY/MUSICIANSHIP I 5 UNITS
Class hours: 5 lecture, plus 2 hours lab arranged
Prerequisite: MUS 105 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
This is a basic course in music theory and musicianship. Orientation is given in the basic elements of major and minor harmony, intervals, keys, triads, voice-leading, non-harmonic tones, and seventh chords. Sightsinging, eartraining, keyboard harmony, melodic dictation, computer music software, computer literacy for musicians, and notation software will also be studied. (Formerly MUS 11) Transfer Credit:CSU;UC

MUS 107
MUSIC THEORY/MUSICIANSHIP II 5 UNITS
Class hours: 5 lecture, plus 2 hour lab arranged
Prerequisite: MUS 106 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
This is a course in music theory and musicianship dealing with Baroque and Classical harmony. Orientation is given in advanced four-part chorale writing, primary and secondary triads, modulation, inversion, dominant 7ths, and non-dominant seventh chords. Other topics to be covered are intermediate keyboard harmony and dictation, intermediate sightsinging, 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. (Formerly MUS 12) Transfer Credit:CSU;UC

MUS 108
MUSIC THEORY/MUSICIANSHIP III 5 UNITS
Class hours: 5 lecture, plus 2 hour lab arranged
Prerequisite: MUS 107 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
This is a course in music theory and musicianship dealing with Classical and Romantic harmony. Orientation 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. (Formerly MUS 13) Transfer Credit:CSU;UC

MUS 109
MUSIC THEORY/MUSICIANSHIP IV 5 UNITS
Class hours: 5 lecture, plus 2 hour lab arranged
Prerequisite: MUS 108 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
This is a course in music theory and musicianship dealing with Romantic and 20th century harmony. Orientation is given in piano style writing, all chromatically altered chords, advanced modulation, inversion, non-dominant seventh chords, half and fully diminished 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 sightsinging, 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. (Formerly MUS 14/MUS 110) Transfer Credit:CSU;UC

MUS 144
ELECTRONIC SYNTHESIZER I 2 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
This class is an introduction to MIDI, synthesizer programming, sampling, computer sequencing, drum machine technique, and computer composition. Also, the course introduces the basics of acoustics and the physical properties of sound. Compositions will be required of all students. Individual studio time is provided. This course may be taken for a maximum of 4 units. (Formerly MUS 22) Transfer Credit:CSU

MUS 145
ELECTRONIC SYNTHESIZER II 1 UNIT
Class hours: 1 lecture/2 lab, plus 4 hours arranged
Prerequisite: MUS 144 or equivalent with a grade of Credit or “C” or higher.
This course is a continuation of tape studio practices, digital recording, synthesizer performance, and computer based recording and processing. This course may be taken for a maximum of 2 units. (Formerly MUS 23)
Transfer Credit:CSU

**MUS 146 RECORDING TECHNIQUES 2 UNITS**
Class hours:2 lecture/3 lab
Prerequisite: None.
Recommendation: MUS 105 or equivalent with a grade of Credit or “C” or higher.
This course introduces the student to the methods of audio recording for the performing arts. It includes the technical, as well as the artistic, aspects of recording. Emphasis will be placed on the practical use of audio equipment both in a studio situation and on location. This course may be taken for a maximum of 8 units. (Formerly MUS 24)
Transfer Credit:CSU

**APPLIED MUSIC**

**MUS 2** (Not degree applicable)
**COMMERCIAL MUSIC**
**ORIENTATION 1 UNIT**
Class hours:1 lecture/2 lab
Prerequisite: None.
This course provides preparation for professional and semi-professional work as a commercial musician. It includes preparation for auditions, techniques in securing employment, basic knowledge required for practicing musicians, conduct and deportment on the job, how to improve one’s skills and correcting weaknesses in an individual’s qualifications as a practicing professional or semi-professional. (Formerly MUS 48)

**MUS 112** (CAN MUS 22)
**ELEMENTARY PIANO I 2.5 UNITS**
Class hours:2 lecture/1 lab plus 1 hr. lab arr.
Prerequisite: None.
This course focuses on basic study technique, which will include reading, writing, listening and playing. A variety of elementary piano repertoire will be studied. Students learn to understand, experience and appreciate the fundamentals of keyboard musicianship. This course is designed for students with little or no background in piano playing. This course may be taken for a maximum of 5 units. (Formerly MUS 60)
Transfer Credit:CSU;UC

**MUS 113** (CAN MUS 24)
**ELEMENTARY PIANO II 2.5 UNITS**
Class hours:2 lecture/1 lab plus 1 hr. lab arr.
Prerequisite: MUS 112 or equivalent with a grade of Credit or “C” or higher.
This course focuses on the continuation of basic piano, which will include reading, writing, listening and playing. A variety of piano repertoire will be studied. Further emphasis will be on understanding, experiencing and appreciating the fundamentals of keyboard musicianship. This course may be taken for a maximum of 5 units. (Formerly MUS 61)
Transfer Credit:CSU;UC

**MUS 114 INTERMEDIATE PIANO I 2.5 UNITS**
Class hours:2 lecture/1 lab plus 1 hr. lab arr.
Prerequisite: MUS 113 or equivalent with a grade of Credit or “C” or higher.
This course is a continuation of piano study at the intermediate level. A variety of assigned piano repertoire will be studied. Emphasis will be on understanding, experiencing and appreciating more advanced aspects of keyboard musicianship. This course may be taken for a maximum of 5 units. (Formerly MUS 62)
Transfer Credit:CSU;UC

**MUS 115 INTERMEDIATE PIANO II 2.5 UNITS**
Class hours:2 lecture/1 lab plus 1 hr. lab arr.
Prerequisite: MUS 114 or equivalent with a grade of Credit or “C” or higher.
This course is a continuation of piano study that occurred in MUS 114. A variety of assigned piano repertoire at the intermediate to advanced level will be studied. This course may be taken for a maximum of 5 units.
Transfer Credit:CSU;UC

**MUS 116**
**VOICE I 2.5 UNITS**
Class hours:2 lecture/1 lab plus 1 hr. lab arr.
Prerequisite: None.
This course focuses on basic vocal techniques including breath management, posture, phonation, resonation, and diction. A variety of elementary vocal repertoire is introduced from different musical styles: folk, classical, musical theater, and popular songs. Students learn to use the unamplified voice to its best advantage and to interpret and perform songs suited to their individual ability. A concentration on musicianship is emphasized using ear-training techniques. This course may be taken for a maximum of 5 units. (Formerly MUS 40)
Transfer Credit:CSU;UC

**MUS 117**
**VOICE II 2.5 UNITS**
Class hours:2 lecture/1 lab plus 1 hr. lab arr.
Prerequisite: MUS 116 or equivalent with a grade of Credit or “C” or higher.
This course focuses on a continuation of vocal techniques including breath management, posture, phonation, resonation, and diction. A variety of intermediate vocal repertoire will be introduced from different musical styles: folk, classical, musical theater, and popular songs. Student learn to use the unamplified voice to its best advantage and to interpret and perform songs suited to their individual ability. A concentration on musicianship is emphasized using ear-training techniques. This course may be taken for a maximum of 5 units. (Formerly MUS 41)
Transfer Credit:CSU;UC

**MUS 118**
**VOICE III 2.5 UNITS**
Class hours:2 lecture/1 lab plus 1 hr. lab arr.
Prerequisite: MUS 117 or equivalent with a grade of Credit or “C” or higher.
This course emphasizes the technical foundations of singing learned in Voice I and II. The song literature is more advanced and requires an understanding of a broad range of styles as previously discussed in the earlier courses. Ear training and musicianship require specific reading and identification skills. Stylistic interpretation is focused on, as well as performance techniques. Greater involvement with microphone and recording techniques will be encouraged. This course may be taken for a maximum of 5 units. (Formerly MUS 42)
Transfer Credit:CSU;UC

**MUS 119**
**VOICE IV 2.5 UNITS**
Class hours:2 lecture/1 lab plus 1 hr. lab arr.
Prerequisite: MUS 118 or equivalent with a grade of Credit or “C” or higher.
The course continues the study of diction, style, technique, musicianship, and interpretation that occurred in Voice III. Acting with emphasis on stage movement, characterization, and improvisational techniques are explored in greater detail. Singers will be required to perform solos, duets, and in scenes. Popular styles are required to collaborate with recording studio to create projects. This course may be taken for a maximum of 5 units. (Formerly MUS 43)
Transfer Credit:CSU;UC

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
MUS 120
ELEME NTARY GUITAR I 2.5 UNITS
Class hours: 2 lecture/1 lab plus 1 hr. lab arr. 
Prerequisite: None.
This course provides basic instruction in classical and other styles of guitar playing at beginning level. It includes appropriate exercises to develop technical facility, material for sight reading, study of basic chords, and repertoire. The student must provide an acoustic guitar for his/her own use in the class. This course may be taken for a maximum of 5 units. (Formerly MUS 65)
Transfer Credit: CSU; UC

MUS 121
ELEME NTARY GUITAR II 2.5 UNITS
Class hours: 2 lecture/1 lab plus 1 hr. lab arr. 
Prerequisite: MUS 120 or equivalent with a grade of Credit or "C" or higher.
This class refines guitar playing techniques used in elementary classical, flamenco, and other pieces. Elements of improvisation, harmonization, and playing in upper positions are included. This course may be taken for a maximum of 5 units. (Formerly MUS 66)
Transfer Credit: CSU; UC

MUS 122
INTERME DIATE GUITAR I 2.5 UNITS
Class hours: 2 lecture/1 lab plus 1 hr. lab arr. 
Prerequisite: MUS 120 or equivalent with a grade of Credit or "C" or higher.
This class includes instruction in scales, chords, and arpeggios in all keys and positions. Included are intermediate levels of improvisation, accompanying, sightreading, transposition, and the performance of folk, classical, and Flamenco styles. This course may be taken for a maximum of 5 units. (Formerly MUS 67)
Transfer Credit: CSU; UC

MUS 123
INTERME DIATE GUITAR II 2.5 UNITS
Class hours: 2 lecture/1 lab plus 1 hr. lab arr. 
Prerequisite: MUS 122 or equivalent with a grade of Credit or "C" or higher.
This class covers the mastery of the entire guitar fingerboard, a study of intermediate and advanced music in several styles, and the principles of improvisation and transposition. This course may be taken for a maximum of 5 units. (Formerly MUS 68)
Transfer Credit: CSU; UC

MUS 135
THIS BUSINESS OF MUSIC 3 UNITS
Class hours: 3 lecture 
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course focuses on the music business as it relates to the marketplace 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. (Formerly MUS 35)
Transfer Credit: CSU

MUS 142
JAZZ IMPROVISATION 1 UNIT
Class hours: 1 lecture/2 lab 
Prerequisite: None.
Recommendation: Audition.
This course in basic techniques in improvisation begins with simple question-and-answer phrases and progresses to extended solos. It covers detailed and applied knowledge of chord progressions and stresses harmonic forms employed in all phases of jazz. Emphasis will be on the blues, 32-bar standards, and jazz pieces. Included are performance, analysis, listening, written improvisations, playing with records, and transcribed solo study. This course may be taken for a maximum of 4 units. (Formerly MUS 47)
Transfer Credit: CSU; UC

MUS 143
THE JAZZ AND POPULAR SINGER 3 UNITS
Class hours: 3 lecture 
Prerequisite: Audition.
Corequisite: None.
Recommendation: None.
This course focuses on the study of jazz and popular singing styles with emphasis on historical elements, stylistic concepts, theoretical practices, performance procedures, and its function within the music industry. Topics include harmony and ear training for jazz and popular singers, historical analysis of significant singers of this genre, small vocal group jazz ensemble, studio recording techniques, improvisation, solo stylization, ensemble sound concepts, and the study of popular literature. This course may be taken for a maximum of 12 units. (Formerly MUS 36)
Transfer Credit: CSU

MUS 144
PRIVATE STUDY/RECITAL I 1 UNIT
Class hours: 1 lecture plus 6 hours arranged 
Prerequisite: None.
Corequisite: Enrollment in a music-performance course related to the student's private study: MUS 124, 126, 127, 132, 133, 134, 138, 139, 140 or 142.
This course offers applied instruction in voice, piano, traditional band or orchestral instrument with an assigned instructor on the applied music staff. Emphasis is placed on technique and repertoire representative of various periods and composers. It includes one hour per week recital attendance and one half hour individual lesson per week. Performance for a faculty jury will be required at the end of the semester. This course may be taken for a maximum of 2 units. (Formerly MUS 30)
Transfer Credit: UC

MUS 145
PRIVATE STUDY/RECITAL II 1 UNIT
Class hours: 1 lecture plus 6 hours arranged 
Prerequisite: None.
Corequisite: Enrollment in a music-performance course related to the student's private study: MUS 124, 126, 127, 132, 133, 134, 138, 139, 140 or 142.
This course offers applied instruction in voice, piano, or traditional band or orchestral instrument with an assigned instructor on the applied music staff. Emphasis is placed on technique and repertoire representative of various periods and composers. It includes one hour per week recital attendance and one half hour individual lesson per week. Performance for a faculty jury will be required at the end of the semester. This course may be taken for a maximum of 2 units. (Formerly MUS 31)
Transfer Credit: CSU; UC

MUS 146
BASIC APPLIED MUSIC 1 UNIT
Class hours: 1 lecture plus 6 hours arranged 
Prerequisite: None.
Corequisite: Enrollment in a music-performance course related to the student's private study: MUS 124, 126, 127, 132, 133, 134, 138, 139, 140 or 142.
This course offers applied instruction in voice, piano, or traditional band or orchestral instrument with an assigned instructor on the applied music staff. Emphasis is placed on technique and repertoire representative of various periods and composers. It includes one hour per week recital attendance and one half hour individual lesson per week. Performance for a faculty jury will be required at the end of the semester. This course may be taken for a maximum of 2 units. (Formerly MUS 31)
Transfer Credit: CSU; UC

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The course introduces basic principles of successful piano teaching at the beginning level. Special problems encountered in teaching will be addressed. Emphasis will be placed on private and group piano teaching methods, personal development as a teacher and musician, analyzing and selecting appropriate literature, development of technique and reading ability in beginning-level students. Transfer Credit: CSU

MUS 153
THE ART OF TEACHING INTERMEDIATE PIANO 2 UNITS
Class hours: 2 lecture
Prerequisite: MUS 152 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
The course advances students' knowledge of principles and skills essential to teaching piano at the intermediate level. Emphasis will be on continued development of technique and reading ability in intermediate-level students; private and group piano teaching methods; selection of intermediate literature; Baroque, Classical, Romantic and 20th century styles; studio organization and personal development as teacher and musician. Transfer Credit: CSU

MUS 154
PIANO ENSEMBLE 1.5 UNITS
Class hours: 1 lecture/1.5 lab
Prerequisite: MUS 112 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course will survey various origins and history of piano ensemble repertoire. Emphasis on development of basic technical skill, sight reading, transposition, improvisation, correct harmonization of melodies with piano accompaniments, principles of accompanying soloists and ensemble playing. This course may be taken for a maximum of 6 units. Transfer Credit: CSU; UC

PERFORMANCE

MUS 124
CONCERT BAND 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: Audition
Recommendation: None.
The concert band is dedicated to the performance of standard band literature. Emphasis will be placed upon the development of individual musicianship through both large group and small group rehearsal. Musical compositions of a wide variety of styles will be studied. Required participation in concerts may include both on-campus and off-campus events. This course may be taken for a maximum of 10 units. (Formerly MUS 70) Transfer Credit: CSU; UC

MUS 125
COMMUNITY SYMPHONIC BAND 2.5 UNITS
Class hours: 2 lecture/2 lab
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 for a maximum of 10 units. (Formerly MUS 71) Transfer Credit: CSU; UC

MUS 126
PEP BAND 2.5 UNITS
(Fall only)
Class hours: 2 lecture/2 lab
Prerequisite: None.
Recommendation: Music background preferred.
The Pep Band provides entertainment music before and during home football games in the fall season. Additional performances may include both on-campus and off-campus events. This course may be taken for a maximum of 10 units. (Formerly MUS 72) Transfer Credit: CSU

MUS 127
ORCHESTRA 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: Audition.
Recommendation: None.
The orchestra is dedicated to the performance of standard orchestral literature. Emphasis will be placed upon the development of individual musicianship through both large group and small group rehearsal. Musical compositions of a wide variety of styles will be studied. Required participation in concerts may include both on-campus and off-campus events. This course may be taken for a maximum of 10 units. (Formerly MUS 73) Transfer Credit: CSU; UC

MUS 128
COMMUNITY ORCHESTRA 1 UNIT
Class hours: 3 activity/1 performance
Prerequisite: Previous instrumental experience.
Corequisite: None.
Recommendation: None.
The community orchestra is dedicated to the
MUS 129  WOODWIND ENSEMBLE  1.5 UNITS  
Class hours: 1 lecture/2 lab  
Prerequisite: Audition.  
This class provides each individual 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 for a maximum of 6 units. (Formerly MUS 74)  
Transfer Credit: CSU; UC

MUS 130  BRASS ENSEMBLE  1.5 UNITS  
Class hours: 1 lecture/2 activity  
Prerequisite: Audition.  
This class provides each individual the opportunity to learn and execute the principles of brass ensemble playing that only intimate chamber music can provide. Among the topics covered will be musical styles, phrasing, balance and blending techniques, intonation, rehearsal techniques, and performance experience. This course may be taken for a maximum of 6 units. (Formerly MUS 75)  
Transfer Credit: CSU; UC

MUS 131  PERCUSSION ENSEMBLE  1.5 UNITS  
Class hours: 1 lecture/2 lab  
Prerequisite: Audition.  
This class provides each individual the opportunity to learn and execute the principles of percussion ensemble playing that only intimate chamber music can provide. Among the topics covered will be musical styles, phrasing, balance and blending techniques, intonation, rehearsal techniques, and performance experience. This course may be taken for a maximum of 6 units. (Formerly MUS 76)  
Transfer Credit: CSU; UC

MUS 132  GUITAR ENSEMBLE  2.5 UNITS  
Class hours: 2 lecture/2 lab  
Prerequisite: MUS 120 or equivalent with a grade of Credit or “C” or higher, or audition.  
This course is for the intermediate and advanced guitar student, who will gain experience performing music in ensemble situations. Emphasis is given in achieving a professional level of musicianship. Students will be required to perform two concerts, attend extra rehearsals, perform in festivals, practice in music department facilities and provide concert music for campus events. This course may be taken for a maximum of 10 units. (Formerly MUS 77)  
Transfer Credit: CSU; UC

MUS 133  STAGE BAND  2.5 UNITS  
Class hours: 2 lecture/2 lab  
Prerequisite: Audition.  
This course is designed for the student desiring to enter the fields of professional dance music, radio, or theatre orchestra work. Opportunity is provided for practical experience in organizing instrumental combinations of all kinds and sizes. Training is given in standard dance-band phrasing and improvisation. Nationally-known guest artists appear with the group, and opportunities are provided to make professionally-engineered recordings. This course may be taken for a maximum of 10 units. (Formerly MUS 78)  
Transfer Credit: CSU

MUS 134  JAZZ ENSEMBLE  2.5 UNITS  
Class hours: 2 lecture/2 lab  
Prerequisite: Audition.  
Recommendation: None.  
The community jazz ensemble is dedicated to the performance of standard jazz band literature. Emphasis will be placed upon the development of individual musicianship through both large group and small group rehearsal. Musical compositions of a wide variety of styles will be studied. Required participation in concerts may include both on-campus and off-campus events. This course may be taken for a maximum of 10 units. (Formerly MUS 79)  
Transfer Credit: CSU; UC

MUS 136  STRING ENSEMBLE  1.5 UNITS  
Class hours: 1 lecture/2 lab  
Prerequisite: Audition.  
This class provides each individual student the opportunity to learn and execute the principles of string ensemble playing that only intimate chamber music can provide. Among the topics covered will be musical styles, phrasing, balance and blending techniques, intonation, rehearsal techniques, and performance experience. This course may be taken for a maximum of 6 units. (Formerly MUS 80)  
Transfer Credit: CSU; UC

MUS 138  COMMUNITY CHORUS  2.5 UNITS  
Class hours: 2 lecture/2 lab  
Prerequisite: None.  
This choral ensemble is designed for the student who has had little or no previous vocal experience. Emphasis will be placed on the development of individual musicianship through the study of musical styles, vocal concepts and repertoire. A variety of traditional choral music ranging from renaissance to the twentieth century will be studied and performed. Required participation in concerts may include both on-campus and off-campus events. This course may be taken for a maximum of 10 units. (Formerly MUS 82)  
Transfer Credit: CSU; UC

MUS 139  GOSPEL CHORUS  2.5 UNITS  
Class hours: 2 lecture/2 lab  
Prerequisite: None.  
This choral ensemble is designed for the student who has had little or no previous vocal experience. Emphasis will be placed upon the development of individual musicianship through the study of vocal concepts and repertoire. A variety of gospel styles ranging from traditional to contemporary will be studied and performed. Required participation in concerts may include both on-campus and off-campus events. This course may be taken for a maximum of 10 units. (Formerly MUS 83)  
Transfer Credit: CSU; UC

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MUS 140
POP CHOIR 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: By audition.
This choral ensemble is designed for the student who has had previous vocal experience. Emphasis will be placed upon the development of individual musicianship through the study of musical styles, vocal concepts and repertoire. A wide variety of music ranging from Broadway musicals to pop and jazz charts will be studied. Required participation in concerts may include both on-campus and off-campus events. This course may be taken for a maximum of 10 units. (Formerly MUS 89)
Transfer Credit: CSU

MUS 141
POP/ROCK ENSEMBLE 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: Audition.
This course will provide the students an opportunity to learn and perform contemporary music with an emphasis on pop, rock, and Latin. Aspects to be considered will include style, repertoire, instrumentation, equipment, visual presentation, and management. This course may be taken for a maximum of 10 units. (Formerly MUS 91)

NURSING
(Health Occupations Division)

NRSG 3 (Not degree applicable)
PREPARING FOR NURSING 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
This course is designed for students planning to enter the nursing career. Content includes how to use time and other resources to become a successful nursing student. Overviews of nursing career options and educational pathways are presented, along with trends affecting nursing's future. Students are introduced to communication skills for use with a diverse student and patient population.

NRSG 25 (Not degree applicable)
CLINICAL WORKSHOP 1 0.5 UNIT
Class hours: 4.5 lecture/13.5 lab total semester hrs
Prerequisite: Current license as a Licensed Psychiatric Technician or Licensed Vocational Nurse or completion of one or more nursing core courses in an approved/accredited nursing program.
Corequisite: None.
Recommendation: None.
The purpose of this course is to provide the nursing applicant with theoretical concepts and skill demonstration and practice related to clinical competency necessary for advanced placement students entering the first year of the nursing program. Included are assessment processes and individualized planning to assist the student in attaining the necessary level of skills competence to support success in the nursing program. This course is offered on a credit/no credit basis only. This course may be taken for a maximum of 1.5 units.

NRSG 47T (Not degree applicable)
SUPERVISED NURSING TUTORIAL 0 UNIT
Class hours: 9 lab Open entry/open exit
Prerequisite: None.
Corequisite: Any nursing course or equivalent.
This course is designed to facilitate the learning of nursing knowledge, skills, and concepts through individualized and mediated instruction. It is open to students in the nursing program or planning to transfer into the program. This course is offered on a credit/no credit basis only. (Formerly NRSG 99)

NRSG 200
PHARMACOLOGY FOR NURSES 2 UNITS
Class hours: 2 lecture
Prerequisite: A&P 130 or equivalent with a grade of Credit or "C" or higher.
This course introduces the student to the fundamentals of pharmacology as they relate to the nursing management of drug therapy. Prototype drugs, selected from the major drug classes, are used to illustrate important drug facts. Core drug knowledge is integrated with core patient knowledge to provide a framework for nursing management in drug therapy. (Formerly HO 20, NRSG 20)
Transfer Credit: CSU

NRSG 210
FUNDAMENTALS OF NURSING 2 UNITS
Class hours: 3 lecture/9 lab (6 weeks)
Prerequisite: A&P 130, M1CR 200, HO 151 or HO 152, HO 236, HO 237, PSYC 101 or equivalent with grades of Credit or "C" or higher and admission to Nursing Program.
Corequisite: None.
Recommendation: None.
This course focuses on the introduction and beginning application of therapeutic communication techniques and fundamental skills required for patient care. The role of the nurse as a member of the health care team is introduced. The primary patient focus is the geriatric patient in long-term care settings. The student must receive a grade of "C" or higher in the lecture component and a satisfactory grade in clinical lab to pass the course.
Transfer Credit: CSU

NRSG 211
INTRODUCTION TO THEORETICAL FRAMEWORK 0.5 UNIT
Class hours: 1.5 lecture (6 weeks)
Prerequisite: Admission to the Nursing Program or possession of an active Licensed Psychiatric Technician license.
Corequisite: None.
Recommendation: None.
This course introduces beginning nursing students and Licensed Psychiatric Technicians to the theoretical framework used in the Cerritos College Nursing Program. The roles of the Associate Degree Nurse as Provider of Care, Manager of Care and Member of the Discipline of Nursing are surveyed. An overview of the nursing process and the Roy Adaptation Model for Nursing are presented.
Transfer Credit: CSU

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NRSG 212
MEDICAL-SURGICAL
NURSING 1 4 UNITS
Class hours: 6 lecture/18 lab (6 weeks)
Prerequisite: NRSG 210 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: NRSG 211 and NRSG 213, or equivalent with grades of Credit or “C” or higher or concurrent enrollment.
This course focuses on introduction and application of the Roy Adaptation Model, nursing process and roles of the Associate Degree Nurse. Theories are emphasized as the basis for providing nursing care to culturally and ethnically diverse patients. The focus of patient care is on less acutely ill medical-surgical patients in long-term and acute settings. Basic adult physical assessment skills are introduced and applied to healthy clients with identification of normal and common abnormal findings. 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 213
SURVEY OF PHARMACOLOGY 0.5 UNIT
Class hours: 1.5 lecture (6 weeks)
Prerequisite: A&P 130 or equivalent with a grade of Credit or “C” or higher. Admission to the Nursing Program.
Corequisite: None.
Recommendation: None.
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.
Transfer Credit: CSU

NRSG 214
MEDICAL-SURGICAL
NURSING 2 3 UNITS
Class hours: 4.5 lecture/13.5 lab (6 weeks)
Prerequisite: NRSG 212 or equivalent with a grade of Credit or “C” or higher.
Corequisite: NRSG 211 and NRSG 213 or prior completion with grades of Credit or “C” or higher.
Recommendation: None.
This course focuses on the application of the Roy Model and Nursing Process for the care of patients with specific conditions. Theory and application of physical assessment of the healthy adult continues and is applied clinically to patients in acute care settings. The focus of patient care is the acutely ill patient in medical-surgical care 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.
(Formerly NRSG 1.3/NRSG 207)
Transfer Credit: CSU

NRSG 215
ADVANCED PLACEMENT BRIDGE 1 UNIT
Class hours: 2 lecture (9 weeks)
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 Credit or “C” or higher.
Corequisite: None.
Recommendation: Completion of READ 54, ENGL 52, and MATH 60 or equivalent with a grade of “C” or higher or successful completion of the college placement process.
This course introduces Licensed Vocational Nurses and students transferring from other nursing programs to the theoretical framework used in the Cerritos College Nursing Program. The roles of the Associate Degree Nurse as Provider of Care, Manager of Care and Member of the Discipline of Nursing are surveyed. The Roy Adaptation Model for Nursing is taught as the basis for providing nursing care. Content also includes communication theory and application, client teaching concepts, assertion theory, and critical thinking foundational skills. Assessment of prior learning is used to guide individual students in preparing for advanced placement in the nursing program.
(Formerly NRSG 1.5)
Transfer Credit: CSU

NRSG 220
MEDICAL-SURGICAL NURSING 3 5.5 UNITS
Class hours: 6 lecture/15 lab
Prerequisite: NRSG 211, NRSG 213, NRSG 214 or equivalent with grades of Credit or “C” or higher. For Option B and E students: Admission to the Nursing Program.
Corequisite: None.
Recommendation: None.
This course focuses on increasingly complex nursing theory and clinical application of more complex skills required for care of adult medical-surgical patients in an acute care setting. Women’s health disorders are also emphasized and the role of the nurse as Manager of Care is introduced. The student must receive a grade of “C” or higher in the lecture component and a satisfactory grade in clinical lab in order to pass the course.
(Formerly NRSG 2.2/NRSG 218)
Transfer Credit: CSU

NRSG 222
MATERNAL/CHILD NURSING 5.5 UNITS
Class hours: 6 lecture/15 lab
Prerequisite: NRSG 220 and HO 236 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: This course focuses on the theory and clinical application of concepts related to the nursing care of childbearing women and children. The Roy Adaptation Model and nursing process are the theoretical framework emphasized as the basis for providing nursing care. Content includes normal and pathophysiological conditions of pregnancy and acute and chronic conditions of infants, children and adolescents. Acute and community based care settings are utilized. The student must receive a “C” grade or higher in the lecture component and a satisfactory grade in clinical lab in order to pass the course.
(Formerly NRSG 1.4/NRSG 208)
Transfer Credit: CSU

NRSG 230
PSYCHOSOCIAL AND COMMUNITY NURSING 5 UNITS
Class hours: 6 lecture/12 lab
Prerequisite: NRSG 222 or equivalent with a grade of Credit or “C” or higher. For Option C, D, E and F students: Admission to the Nursing Program.
The focus of this course is on the theory and clinical application of the Roy Adaptation Model and concepts related to the roles of the Associate Degree Nurse in the care of clients in the community settings. These include acute and psychiatric care settings, various rehabilitation programs, hospices, schools, and other community-based settings. Continuity of care and the ADN’s role in case management are stressed. 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.
(Formerly NRSG 2.2/NRSG 218)
Transfer Credit: CSU

NRSG 232
MEDICAL-SURGICAL NURSING 4 5.5 UNITS
Class hours: 6 lecture/15 lab (9 weeks)
Prerequisite: NRSG 230 or equivalent with a grade of Credit or “C” or higher. For Option C, D, and E students: Admission to the Nursing Program.

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The focus of this course is on the theory and application of the nursing process based on the Roy Adaptation Model and in the care of the seriously ill medical-surgical patient. There is continued emphasis on theories and principles of providing nursing care to medical-surgical patients and management of care, which were introduced in previous courses. 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. (Formerly NRSG 2.1/NRSG 219)
Transfer Credit: CSU

NRSG 240 Effective Spring 2002
MEDICAL-SURGICAL NURSING 5 5 UNITS
Class hours: 6 lecture/12 lab (9 weeks)
Prerequisite: NRSG 232 or equivalent with a grade of Credit or "C" or higher. For Option E and F Students: Admission to the Nursing Program.
The main focus of this course is the theory and application of the nursing process in special care areas, utilizing the Roy Adaptation Model. The nurse's role as Manager of Care introduced in previous courses, continues to be emphasized and refined. Course content includes: legal and ethical issues as they apply to nursing practice, community health issues, and advanced medical-surgical concepts. 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. (Formerly NRSG 2.3/NRSG 270)
Transfer Credit: CSU

NRSG 242 Effective Spring 2002
PROFESSIONAL ROLE TRANSITION 3 UNITS
Class hours: 1.5 lecture/23 lab (6 weeks)
Prerequisite: NRSG 240 or equivalent with a grade of Credit or "C" or higher.
The focus of this course is on the role transition from student nurse to registered nurse. Preparation for and professional responsibilities in employment are discussed. The student participates as a preceptor member of the health care team and assumes responsibility for a group of patients under the direct supervision of a qualified registered nurse. 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. (Formerly NRSG 2.4/NRSG 280)
Transfer Credit: CSU

NRSG 251 BASIC ADULT PHYSICAL ASSESSMENT 1 UNIT
Class hours: 1 lecture/3 lab (9 weeks)
Prerequisite: Current or prior enrollment in an accredited nursing program or licensure as a health care provider.
Corequisite: None.
Recommendation: None.
This course focuses on physical examination of healthy adults stressing identification of normal and common abnormal findings in diverse populations. Variations due to normal age-related changes are presented. Examination techniques and elements of assessing functional, cognitive, and fluid status are introduced. Analysis of findings with clinical application is emphasized from the perspective of the entry-level Registered Nurse. Basic physical examination is limited to selected body structures within the following organ systems: integumentary, sensory, respiratory, cardiovascular, gastrointestinal, musculoskeletal, and neurological. This course is offered on a credit/no credit basis only. (Formerly NRSG 6)
Transfer Credit: CSU

ORNH 1 (Not degree applicable)
ORNAMENTAL HORTICULTURE
(Science/ Engineering/ Math)
See Earth Science 104

OFFICE TECHNOLOGIES
SEE BCOT
(Business Computerized Office Technologies)

NRSG 270 MEDICAL-SURGICAL NURSING V 5 UNITS
Class hours: 6 lecture/12 lab (9 weeks)
Prerequisite: NRSG 219 or equivalent with a grade of Credit or "C" or higher. For Option C Students: HO 236 and HO 237 or equivalent with grades of Credit or "C" or higher. For Option E and F Students: Admission to the Nursing Program.
The main focus of this course is the theory and application of the nursing process in special care areas, utilizing the Roy Adaptation Model. Leadership principles introduced in NRSG 219 will continue to be emphasized and refined. Course content includes: legal issues as they apply to nursing practice, community health issues, and advanced medical-surgical concepts. 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. (Formerly NRSG 2.3)
Transfer Credit: CSU

NRSG 280 PROFESSIONAL ROLE TRANSITION 3 UNITS
Class hours: 1.5 lecture/23 lab (6 weeks)
Prerequisite: NRSG 270 or equivalent with a grade of Credit or "C" or higher.
The focus of this course is on the role transition from student nurse to registered nurse. Preparation for and professional responsibilities in employment will be discussed. The student will participate as a preceptor member of the health care team and will assume responsibility for a group of patients under the direct supervision of a qualified registered nurse. Uniforms are required. 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. (Formerly NRSG 2.4)
Transfer Credit: CSU

OCEANOGRAPHY
(Science/ Engineering/ Math)
See Earth Science 104

LANDSCAPE-GARDENER TRAINING 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides classroom education and practical experience so students can be readily employable as landscape gardeners. Basic knowledge and skills are provided in the areas of basic horticulture, landscaping, use of power equipment, irrigation, and safety. Practical skills are taught through supervised, outside, on-the-job experiences. Fundamentals of landscaping and horticulture are taught for rapid employability. This course is offered on a credit/no credit basis only. (Formerly ORNH 10.5)
Announcement of Courses

ORNH 2 (Not degree applicable)  1 UNIT
BONSAI  
Class hours: 1.5 lecture/1.5 lab  (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
Bonsai is the Japanese art of creating a perfect tree in miniature form. Basic classic Japanese styles are explained, discussed, and demonstrated in this class. The history of bonsai, use of basic tools, wiring, and plant choices are covered. Care, pruning, fertilizing, and basic watering methods are incorporated with in-class projects. This course may be taken for a maximum of 2 units. (Formerly ORNH 69.2/ORNH 28)

ORNH 3 (Not degree applicable)  1 UNIT
ADVANCED BONSAI  
Class hours: 1.5 lecture/1.5 lab  (9 weeks)
Prerequisite: ORNH 2 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
Bonsai is the Japanese art of creating a perfect tree in miniature form. This class involves more advanced and creative styles of bonsai. Fertilizing, root pruning, maintenance, and care are stressed in this class. This course may be taken for a maximum of 2 units. (Formerly ORNH 69.3/ORNH 29)

ORNH 4A (Not degree applicable)  2 UNITS
ADVANCED SPECIAL OCCASIONS FLORAL DESIGN III  
Class hours: 1.5 lecture/1.5 lab  (9 weeks)
Prerequisite: ORNH 61A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This advanced course emphasizes advanced floral techniques and upscale designs for special fall parties and holidays. A wide variety of flowers are used, and special projects are developed and implemented. This course may be taken for a maximum of 4 units. (Formerly ORNH 69.1/ORNH 33.3)

ORNH 4B (Not degree applicable)  2 UNITS
ADVANCED SPECIAL OCCASIONS FLORAL DESIGN IV  
Class hours: 1.5 lecture/1.5 lab  (9 weeks)
Prerequisite: ORNH 61B or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This advanced course emphasizes advanced floral techniques and upscale designs for special spring, summer parties and holidays. A wide variety of flowers are used, and special projects are developed and implemented. This course may be taken for a maximum of 4 units. (Formerly ORNH 35.4)

ORNH 50  1.5 UNITS
BASIC LANDSCAPE IRRIGATION  
Class hours: 2 lecture/3 lab  (9 weeks)
Prerequisite: None.
The course will introduce students to the basic types of irrigation equipment and materials. Emphasis will be on design of residential systems, how to determine flow calculations, soil/plant water relationships, site and drainage problems. Lab projects will include actual design problems. Topics to be covered will include plumbing codes, backflow prevention, cost estimating and related subjects. (Formerly ORNH 20)

ORNH 51  1.5 UNITS
ADVANCED LANDSCAPE IRRIGATION  
Class hours: 2 lecture/3 lab  (9 weeks)
Prerequisite: ORNH 50 or equivalent with a grade of Credit or “C” or higher.
The course will cover advanced irrigation systems, equipment and materials. Emphasis will be on system design, flow calculations, large commercial site requirements and drainage. Topics to be covered will include plumbing codes, fountains, pools, automatic controls, cost estimating and related subjects. (Formerly ORNH 21)

ORNH 52  1.5 UNITS
RESIDENTIAL LANDSCAPE DESIGN  
Class hours: 2 lecture/3 lab  (9 weeks)
Prerequisite: ORNH 100 or equivalent with a grade of Credit or “C” or higher.
This course covers basic residential design concepts. Emphasis is placed on low maintenance, energy saving residential landscape design. Topics to be covered will include design of entry and sidewalk areas, patios, play and service areas. (Formerly ORNH 22)

ORNH 53  1.5 UNITS
COMMERCIAL LANDSCAPE DESIGN  
Class hours: 2 lecture/3 lab  (9 weeks)
Prerequisite: ORNH 100 or equivalent with a grade of Credit or “C” or higher.
Basic commercial design concepts and elements, low maintenance plant materials and turf will be presented. Emphasis will be placed on attention to traffic patterns and parking as related to the Southern California environment and lifestyles. (Formerly ORNH 23)

ORNH 54  1.5 UNITS
LANDSCAPE CONTRACTING/ MANAGEMENT  
Class hours: 3 lecture  (9 weeks)
Prerequisite: None.
This course is an introduction to the landscape business. Management principles related to the industry such as hiring and training employees, on site supervision, work scheduling and labor relations will be covered. State and local licensing regulations will be introduced. (Formerly ORNH 24)

ORNH 55  1.5 UNITS
LANDSCAPE CONTRACTING/ OPERATIONS  
Class hours: 3 lecture  (9 weeks)
Prerequisite: None.
This course is an introduction to the operations of landscape contracting: included are basic landscape construction practices, pricing of materials, bidding and estimation, and the ordering and handling of plant materials. Landscape contracting philosophy, ethics, law and professional business practices will also be presented. (Formerly ORNH 25)

ORNH 56  1.5 UNITS
PLANT DISEASE CONCEPTS  
Class hours: 2 lecture/3 lab  (9 weeks)
Prerequisite: ORNH 100 or equivalent with a grade of Credit or “C” or higher.
This course presents basic disease concepts pertaining to ornamental plant material in the Southern California area. Diagnosis, appropriate management practices and recognition of common plant diseases are stressed. (Formerly ORNH 26)

ORNH 57  1.5 UNITS
PLANT DISEASE MANAGEMENT  
Class hours: 2 lecture/3 lab  (9 weeks)
Prerequisite: ORNH 56 or equivalent with a grade of Credit or “C” or higher.
This course introduces the student to most prevalent diseases of Southern California plants. Emphasis of the class will be on the recognition of symptoms in relation to proper treatment and prevention of local plant diseases. (Formerly ORNH 27)

ORNH 58  2 UNITS
INTERIOR PLANTSCAPES: HOUSEPLANTS  
Class hours: 2 lecture/1 lab  
Prerequisite: None.
Recommendation: ORNH 100 or equivalent with a grade of Credit or “C” or higher.
This is an introductory course in houseplants. A study will be made of factors involved in

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
houseplant selection, care, maintenance, and proper use. Decisions involved in proper plant placement for interior horticultural use will be examined. (Formerly ORNH 30)

**ORNH 59**
**BASIC FLORAL DESIGN** 2 UNITS
Class hours: 1.5 lecture/1.5 lab
Prerequisite: None.
This course will provide the student with knowledge, skills and experience which are basic to the floral industry. The course will cover basic floral arrangements, the use of standard flowers in bud vases, simple corsages, dish gardens, holiday arrangements and novelty items. Skills learned will qualify students for entry level employment in the floral industry. (Formerly ORNH 31)

**ORNH 60**
**ADVANCED FLORAL DESIGN** 2 UNITS
Class hours: 1.5 lecture/1.5 lab
Prerequisite: ORNH 59 or equivalent with a grade of Credit or “C” or higher.
This course emphasizes advanced floral design. Non-traditional type flowers will be combined into mixed arrangements, high style, holiday arrangements, wedding and funeral projects. Dry flower arrangements, window displays, fruit and party designs will also be covered. This course may be taken for a maximum of 4 units. (Formerly ORNH 32)

**ORNH 61A**
**SPECIAL OCCASIONS** FLORAL DESIGN I 2 UNITS
Class hours: 1.5 lecture/1.5 lab
Prerequisite: ORNH 59 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course focuses on floral designs for weddings and the many floral specialties that may be used for weddings. A wide variety of flowers will be used and special projects will be developed and executed. This course may be taken for a maximum of 4 units. (Formerly ORNH 33.2)

**ORNH 62A**
**WEDDING FLORAL DESIGN** 2 UNITS
Class hours: 1.5 lecture/1.5 lab
Prerequisite: ORNH 59 or equivalent with a grade of Credit or “C” or higher.
This course emphasizes floral designs for weddings and the many floral specialties that may be used for weddings. A wide variety of flowers will be used and special projects will be developed and executed. This course may be taken for a maximum of 4 units. (Formerly ORNH 34)

**ORNH 62B**
**WEDDING FLORAL DESIGN I** 2 UNITS
Class hours: 1.5 lecture/1.5 lab
Prerequisite: ORNH 59 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course focuses on floral design for weddings. Emphasis is placed on flower arrangements for the bride and bridal party. A wide variety of flowers will be used and special projects will be developed and implemented. This course may be taken for a maximum of 4 units. (Formerly ORNH 34.1)

**ORNH 62C**
**WEDDING FLORAL DESIGN II** 2 UNITS
Class hours: 1.5 lecture/1.5 lab
Prerequisite: ORNH 59 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course focuses on floral design for weddings. Emphasis is placed on flower arrangements utilized in decorations for the wedding and reception. A wide variety of flowers are used and special projects are developed and implemented. This course may be taken for a maximum of 4 units. (Formerly ORNH 34.2)

**ORNH 63**
**INTEGRATED FLORAL DESIGN** 1 UNIT
Class hours: 1.5 lecture/1.5 lab (9 weeks)
Prerequisite: ORNH 59 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course emphasizes utilization and integration of a variety of floral and non-floral materials in advanced floral design. Silks, fabrics, and dried plant matter are used. This course may be taken for a maximum of 2 units. (Formerly ORNH 35)

**ORNH 64**
**FLORAL DESIGN FOR FUNERALS** 1 UNIT
Class hours: 1.5 lecture/1.5 lab (9 weeks)
Prerequisite: ORNH 59 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course emphasizes advanced floral designs for funerals. A wide variety of flowers and related materials are used to construct assigned projects. This course may be taken for a maximum of 2 units. (Formerly ORNH 36)

**ORNH 65**
**TREE MAINTENANCE I** 1.5 UNITS
Class hours: 3 lecture (9 weeks)
Prerequisite: ORNH 100 or equivalent with a grade of Credit or “C” or higher.
This course covers the basic concepts of tree growth, selection, proper planting methods and soil management. Basic tree pruning techniques, fertilization and irrigation practices will be covered. Current trends and philosophy of tree maintenance of the Southern California area will be emphasized. (Formerly ORNH 40)

**ORNH 66**
**TREE MAINTENANCE II** 1.5 UNITS
Class hours: 3 lecture (9 weeks)
Prerequisite: ORNH 65 or equivalent with a grade of Credit or “C” or higher.
This course introduces fundamental safe working practices and basic safety equipment practices involved with tree maintenance. Cable and bracing techniques and wound repairing will be covered. Spraying fundamentals and integrated pest management controls and practices for Southern California trees will be covered. (Formerly ORNH 41)

**ORNH 67**
**LANDSCAPE DESIGN RENDERING** 1.5 UNITS
Class hours: 3 lecture (9 weeks)
Prerequisite: ORNH 180 or equivalent with a grade of Credit or “C” or higher.
This course is involved with the rendering of landscape designs with various kinds of media. Basic practices and uses of pastels, prisma and markers will be stressed on practical landscape projects. Highlighting, shading, delineating landscape plans for advanced designers of hardscapes and softscapes will be covered. (Formerly ORNH 42)
### ORNH 68
**LANDSCAPE PLANTING DESIGN**  1.5 UNITS  
Class hours: 3 lecture (9 weeks)  
Prerequisite: ORNH 180 or equivalent with a grade of Credit or “C” or higher.  
This course develops plant relationships and combinations of odor, texture, fragrance and shapes of plants for landscapes of Southern California. Planter designs and specialty areas in landscaping themes and styles will be developed. Seasonal color changes in planting designs and choices of popular styles and themes will be investigated of landscape designs of Southern California.  
(Formerly ORNH 43)

### ORNH 100
**INTRODUCTION TO ORNAMENTAL HORTICULTURE**  3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This is an introductory course in Ornamental Horticulture. Plant structure, terms, growth, and functions, plant identification, water, soil, light, temperature, fertilizers, propagation, pruning, insects, weeds, diseases, and industry will be studied.  
(Formerly ORNH 10)  
Transfer Credit: CSU

### ORNH 110
**SOILS**  4 UNITS  
Class hours: 3 lecture/3 lab  
Prerequisite: ORNH 100 or equivalent with a grade of Credit or “C” or higher.  
This is an introductory course in soils. Soil development, soil and water, soil properties, physical and chemical, use of fertilizer, conservation and irrigation will be presented. The effect of soils and water on living plants will be observed.  
(Formerly ORNH 11)  
Transfer Credit: CSU/UC

### ORNH 120
**ORNAMENTAL TREES**  4 UNITS  
Class hours: 3 lecture/3 lab  
Prerequisite: ORNH 100 or equivalent with a grade of Credit or “C” or higher.  
This course includes identification of trees, growth habits, and use of trees adapted to So. California. It includes the planting, growth, fertilizing, pruning, disease and pest control.  
(Formerly ORNH 12)  
Transfer Credit: CSU

### ORNH 130
**ORNAMENTAL SHRUBS**  4 UNITS  
Class hours: 3 lecture/3 lab  
Prerequisite: ORNH 100 or equivalent with a grade of Credit or “C” or higher.  
This is a course in identification of ornamental shrubs, their habits, culture, diseases, and problems will be studied. The use of specific shrubs in landscaping will be presented.  
(Formerly ORNH 13)  
Transfer Credit: CSU

### ORNH 140
**PLANT PROPAGATION**  3 UNITS  
Class hours: 2 lecture/3 lab  
Prerequisite: ORNH 100 or equivalent with a grade of Credit or “C” or higher.  
This is a course in theory and practices of plant propagation—seeding, cutting, division, layering, budding, and grafting. Study will include: propagation structures, environmental mediums, the root inducing materials, the light and control units. Students will be required to propagate plant material in the lab.  
(Formerly ORNH 14)  
Transfer Credit: CSU

### ORNH 150
**TURF GRASS MANAGEMENT AND GROUNDCOVERS**  4 UNITS  
Class hours: 3 lecture/3 lab  
Prerequisite: ORNH 100 or equivalent with a grade of Credit or “C” or higher.  
This is a practical study of turf and groundcovers, covering identification, fertilization, soil problems, drainage, weed and pest control and maintenance. Included is propagation, turf equipment, turf plot study and specialized problems.  
(Formerly ORNH 15)  
Transfer Credit: CSU

### ORNH 160
**INSECTS AND WEEDS**  4 UNITS  
Class hours: 3 lecture/3 lab  
Prerequisite: ORNH 100 or equivalent with a grade of Credit or “C” or higher.  
A course in insects and weeds as related to plant growth and culture. Identification, life cycle, plant damage and controls will be studied.  
(This course will help prepare for California Agriculture Pest and Weed Control Advisors license examination.)  
(Formerly ORNH 16)  
Transfer Credit: CSU

### ORNH 180
**BASIC LANDSCAPE DESIGN**  4 UNITS  
Class hours: 3 lecture/3 lab  
Prerequisite: ORNH 100 or equivalent with a grade of Credit or “C” or higher.  
This is an introductory course in landscape design as it applies to Southern California weather, soil, environment, and plant materials. It includes basic estimating, sprinkler systems, and relandscaping techniques for small residences.  
(Formerly ORNH 18)  
Transfer Credit: CSU

### ORNH 190
**NURSERY MANAGEMENT AND OPERATIONS**  3 UNITS  
Class hours: 3 lecture  
Prerequisite: ORNH 100 or equivalent with a grade of Credit or “C” or higher.  
This course presents an overview of the nursery industry. It includes topics such as wholesale marketing and shipping, soil management, propagation techniques, irrigation methods and nursery stock management. Storage facilities, inventory control and appropriate business practices specific to the nursery industry will be emphasized.  
(Formerly ORNH 19)  
Transfer Credit: CSU

### PARALEGAL
SEE BL  
(Business Paralegal)

### PHARMACY TECHNICIAN
(Health Occupations Division)

### PHAR 40L
**PHARMACY CLERK LAB**  1 UNIT  
Class hours: 1 lecture/2 lab (12 weeks)  
Prerequisite: None.  
Corequisite: PHAR 60 and PHAR 61  
Recommendation: None.  
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 4)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Class Information</th>
<th>Prerequisites/Co-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 45</td>
<td>RETAIL PRODUCTS FOR PHARMACY CLERKS</td>
<td>2</td>
<td>Class hours: 3 lecture (12 weeks)</td>
<td>Prerequisite: None. Co-requisite: None. Recommendation: None. This course provides basic knowledge about Over-the-Counter (OTC) products in relation to their accepted therapeutic uses. Students will understand the steps involved in safely choosing a non-prescription product. (Formerly PHAR 5)</td>
</tr>
<tr>
<td>PHAR 47</td>
<td>PHARMACY CLERK CLINICAL EXPERIENCE</td>
<td>2</td>
<td>Class hours: 1 lecture/123 variable semester lab hours (6 weeks)</td>
<td>Prerequisite: PHAR 60 and PHAR 40L or equivalent with grades of Credit or “C” or higher. Verification of negative chest x-ray for non-reactive T.B. skin test within the last year. Co-requisite: None. Recommendation: None. This course is designed to provide the student with practical clerk experiences in selected outpatient community pharmacy settings working under the supervision of a registered pharmacist. (Formerly PHAR 6)</td>
</tr>
<tr>
<td>PHAR 50</td>
<td>PHARMACEUTICS</td>
<td>1.5</td>
<td>Class hours: 3 lecture (9 weeks)</td>
<td>Prerequisite: HO 56 or equivalent with a grade of Credit or “C” or higher. Recommendation: None. This course is designed to develop the practical application of fundamentals of measurements and mathematics utilized by the pharmacy technician. (Formerly PHAR 12)</td>
</tr>
<tr>
<td>PHAR 60</td>
<td>INTRODUCTION TO PHARMACY</td>
<td>1</td>
<td>Class hours: 3 lecture (6 weeks)</td>
<td>Prerequisite: None. Co-requisite: PHAR 40L. Recommendation: None. This introductory course is designed to provide the student with an overview of the pharmacy profession and the role of the pharmacist, pharmacy technician and pharmacy clerk. PHAR 40L corequisite is required for Pharmacy Clerk track; no corequisite is required for Pharmacy Technician track. (Formerly PHAR 10)</td>
</tr>
<tr>
<td>PHAR 61</td>
<td>PHARMACY SKILLS DEVELOPMENT</td>
<td>1</td>
<td>Class hours: 3 lecture (6 weeks)</td>
<td>Prerequisite: None. Co-requisite: PHAR 40L. Recommendation: None. This course is designed for the Pharmacy Technician/Clerk to develop those skills necessary to work in a setting dealing with patients (customers), pharmacists, and co-workers. Students will develop an understanding for the practical application of necessary etiquette, typing, and computer skills. PHAR 40L co-requisite is required for Pharmacy Clerk track; no corequisite is required for Pharmacy Technician track. (Formerly PHAR 3/PHAR 10.1)</td>
</tr>
<tr>
<td>PHAR 62</td>
<td>PHARMACY OPERATIONS I</td>
<td>0.5</td>
<td>Class hours: 2 lecture/1 lab (6 weeks)</td>
<td>Prerequisite: PHAR 60 and PHAR 61 or equivalent with grades of Credit of “C” or higher. Admission to Pharmacy Technician Program. 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. (Formerly PHAR 11)</td>
</tr>
<tr>
<td>PHAR 63</td>
<td>PHARMACY OPERATIONS II</td>
<td>3</td>
<td>Class hours: 3 lecture (6 weeks)</td>
<td>Prerequisite: PHAR 62, BASS 62, and BASS 135 or equivalent with grades of Credit of “C” or higher. Certificate verifying typing proficiency at 30 wpm may substitute for BASS 62 and BASS 135. 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 formulas, patient profiles, patient charts, processing of medication orders, drug manufacturing and packaging, and computers. (Formerly PHAR 13)</td>
</tr>
<tr>
<td>PHAR 64</td>
<td>PHARMACY OPERATIONS III</td>
<td>2</td>
<td>Class hours: 2 lecture/1 lab</td>
<td>Prerequisite: PHAR 50 and PHAR 63 or equivalent with grades of Credit of “C” or higher. PHAR 63 and PHAR 64 may be taken concurrently; 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. (Formerly PHAR 14)</td>
</tr>
<tr>
<td>PHAR 81</td>
<td>OVER-THE-COUNTER PRODUCTS</td>
<td>3</td>
<td>Class hours: 3 lecture</td>
<td>Prerequisite: MA 161 or equivalent with a grade of Credit 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. (Formerly PHAR 15)</td>
</tr>
<tr>
<td>PHAR 83</td>
<td>PHARMACY TECHNICIAN PHARMACOLOGY I</td>
<td>3</td>
<td>Class hours: 3 lecture</td>
<td>Prerequisite: MA 161 or equivalent with a grade of Credit or “C” or higher. Recommendation: A&amp;P 120 or equivalent with a grade of Credit 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. (Formerly PHAR 21)</td>
</tr>
<tr>
<td>PHAR 85</td>
<td>PHARMACY TECHNICIAN PHARMACOLOGY II</td>
<td>3</td>
<td>Class hours: 3 lecture</td>
<td>Prerequisite: MA 161 or equivalent with a grade of Credit or “C” or higher. Recommendation: A&amp;P 120 or equivalent with a grade of Credit or “C” or higher. This pharmacology course covers information on drugs affecting the respiratory, integumentary, nervous and cardiovascular system, 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. (Formerly PHAR 21)</td>
</tr>
</tbody>
</table>
PHAR 90
CLINICAL EXPERIENCE I  3 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Pharmacy Technician work experience 73 or 20 hours of employment per week for Pharmacy Technician work experience 74. The employment must be in a job related to the student's educational goal.
Prerequisite: None.
Corequisite: Enrollment in the Pharmacy Technician vocational program with 7 or more units including occupational work experience.
Occupational Work Experience is a supervised employment program in an approved work station related to the student's declared major. Students meet with their instructor for a minimum of one hour per week and will receive credit for on-the-job learning experiences that are new or are an expansion of their regular responsibilities. This course may be repeated for a maximum of 8 units based on the number of hours on the job. (Formerly PHAR 73/74)

PHILOSOPHY
(Humanities/Social Sciences Division)

PHIL 100  (CAN PHIL 2)
INTRODUCTION TO PHILOSOPHY  3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course gives 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. (Formerly PHIL 1) Transfer Credit:CSU;UC

PHIL 200  (CAN PHIL 6)
WORLD RELIGIONS  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or ENGL 155 or equivalent with a grade of Credit or “C” or higher is strongly recommended.
This course presents a comparative study of the major religions of the world including Hinduism, Buddhism, Taoism, Shinto, Judaism, Christianity, Islam, etc. The course is a survey of the origins, historic development, primary source book, theological doctrines and value system. (Formerly PHIL 7) Transfer Credit:CSU;UC

PHIL 201
INTRODUCTION TO TWENTIETH CENTURY PHILOSOPHY  3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or completion of ENGL 52 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: Satisfactory completion of READ 42 or equivalent with a grade of Credit or “C” or higher.
This course is a survey of the major philosophical movements that characterize the twentieth century, including the rise of Continental, Anglo-American, Marxist, Feminist, Asian, African, and Latin American

Announcement of Courses

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. (Formerly PHAR 22)
Announcement of Courses

PHILOSOPHY OF THE BIBLE II

Class hours: 3 lecture
Prerequisite: ENGL 100 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course provides instruction in the basic principles of color photography with darkroom experience. Negative and positive film developing and printing techniques are investigated. Emphasis is on photography as a fine art, stressing beginning visual awareness. (Formerly PHOT 34)
Transfer Credit: CSU

PHOT 112
INTERMEDIATE DIGITAL PHOTOGRAPHY

Class hours: 2 lecture/4 lab
Prerequisite: PHOT 110 or ART 192 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course provides instruction in the 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. (Formerly PHOT 92)
Transfer Credit: CSU

PHOT 124
INTERMEDIATE COLOR PHOTOGRAPHY

Class hours: 1 lecture/3 lab
Prerequisite: PHOT 122 or equivalent with a grade of Credit or "C" or higher.
This course is a continuation of principles learned in the introductory color class, with more in-depth skill development and image analysis of Biblical materials from an academic point of view will be presented and discussed. (Formerly PHIL 16)
Transfer Credit: CSU

PHIL 204
PHILOSOPHY OF THE BIBLE I
(HEBREW SCRIPTURES)

Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process to enter ENGL 100, or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course covers the use of color photographic transparency materials in photography. Topics include color theory, color exposure techniques, film types, print techniques, composition, and the history of color photography. Emphasis is placed on the 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. (Formerly PHOT 92)
Transfer Credit: CSU

PHOT 102
INTERMEDIATE PHOTOGRAPHY

Class hours: 2 lecture/4 lab
Prerequisite: PHOT 100 or equivalent with a grade of Credit or "C" or higher.
This course is a general introduction to the philosophical, religious, cultural and historical influences on the development of the Hebrew Scriptures. The methods of critical analysis of Biblical materials from an academic point of view will be presented and discussed. (Formerly PHIL 15)
Transfer Credit: CSU

PHIL 206
PHILOSOPHY OF THE BIBLE II
(CHRISTIAN SCRIPTURES)

Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process to enter ENGL 100, or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course is a general introduction to the philosophical, religious, cultural and historical influences on the development of the Hebrew Scriptures. The methods of critical analysis of Biblical materials from an academic point of view will be presented and discussed. (Formerly PHIL 16)
Transfer Credit: CSU

PHIL 202
CRITICAL THINKING AND ARGUMENTATIVE WRITING

Class hours: 3 lecture
Prerequisite: ENGL 100 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
This course develops critical thinking skills necessary for evaluating and formulating argumentative/persuasive essays and practice in applying those skills. (Formerly PHIL 11)
Transfer Credit: CSU

PHIL 204
PHILOSOPHY OF THE BIBLE I

Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process to enter ENGL 100, or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course is a general introduction to the philosophical, religious, cultural and historical influences on the development of the Hebrew Scriptures. The methods of critical analysis of Biblical materials from an academic point of view will be presented and discussed. (Formerly PHIL 15)
Transfer Credit: CSU

PHIL 206
PHILOSOPHY OF THE BIBLE II

Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process to enter ENGL 100, or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course is a general introduction to the philosophical, religious, cultural and historical influences on the development of the Hebrew Scriptures. The methods of critical analysis of Biblical materials from an academic point of view will be presented and discussed. (Formerly PHIL 16)
Transfer Credit: CSU

PHOT 102
INTERMEDIATE PHOTOGRAPHY

Class hours: 2 lecture/4 lab
Prerequisite: PHOT 100 or equivalent with a grade of Credit or "C" or higher.
This is a beginning course in the theory and practice of photography. The lecture portion of the class will emphasize historical trends, contemporary applications, and an appreciation of photography as an art and as a craft. The lab portion will introduce the student to camera technique, film exposure, processing, darkroom techniques, lighting, and composition. (Formerly PHOT 29)
Transfer Credit: CSU

PHOT 100
INTRODUCTORY PHOTOGRAPHY

Class hours: 2 lecture/4 lab
Prerequisite: None.
This is a beginning course in the theory and practice of photography. The lecture portion of the class will emphasize historical trends, contemporary applications, and an appreciation of photography as an art and as a craft. The lab portion will introduce the student to camera technique, film exposure, processing, darkroom techniques, lighting, and composition. (Formerly PHOT 29)
Transfer Credit: CSU

PHOT 100

(Formerly PHOT 18)

PHOT 102

(Formerly PHOT 29)

PHOT 110

(Formerly PHOT 30)

PHOT 112

(Formerly PHOT 34)

PHOT 122

(Formerly PHOT 92)

PHOT 124

(Formerly PHOT 93)

PHIL 202

(Formerly PHIL 11)

PHIL 204

(Formerly PHIL 15)

PHIL 206

(Formerly PHIL 16)

PHOT 100

(Formerly PHOT 29)

PHOT 102

(Formerly PHOT 29)

PHOT 110

(Formerly PHOT 30)

PHOT 112

(Formerly PHOT 34)

PHOT 122

(Formerly PHOT 92)

PHOT 124

(Formerly PHOT 93)

PHIL 202

(Formerly PHIL 11)

PHIL 204

(Formerly PHIL 15)

PHIL 206

(Formerly PHIL 16)
evaluation. The student is encouraged to explore color photography through experience with materials, darkroom techniques, and development of personal vision and style. (Formerly PHOT 35)
Transfer Credit: CSU

PHOT 160
HISTORY OF PHOTOGRAPHY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This comprehensive course covers photography from its very beginning to the present and speculates on the future. Great photographers, old cameras and new, and a variety of photographic processes will be covered. Part of the class time will be devoted to demonstration of old cameras and processes, and to field trips to view historical cameras and photographs. (Formerly PHOT 40)
Transfer Credit: CSU; UC

PHOT 200
ADVANCED PHOTOGRAPHY 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 102 or equivalent with a grade of Credit or "C" or higher.
This course is designed to advance each student’s knowledge and skills in film processing, printing, large-format camera, lighting, camera techniques, and a professional presentation of photographs. Each student will be expected to present a high quality portfolio at the end of the semester. Class will include black-and-white as well as color assignments. (Formerly PHOT 31)
Transfer Credit: CSU

PHOT 220
ADVANCED COLOR PHOTOGRAPHY 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
Recommendation: PHOT 124 or equivalent with a grade of Credit or "C" or higher.
This course will focus on the non-traditional use of light, color, and materials in the production of color photographic images. Topics include shooting techniques, lighting techniques, film and paper types, darkroom methods, and camera techniques. This course may be taken for a maximum of 6 units. (Formerly PHOT 42)
Transfer Credit: CSU

PHOT 230
PORTRAIT PHOTOGRAPHY 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 100 or equivalent with a grade of Credit or "C" or higher.
This is a beginning course in the theory and practice of camera techniques, posing, and lighting as applied to the field of professional portraiture. Lectures will include use of professional lab services and promoting portrait photography. (Formerly PHOT 41)
Transfer Credit: CSU

PHOT 232
STUDIO PROBLEMS IN PHOTOGRAPHY 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 102 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course examines a variety of approaches to studio problems in photography. Concept development and execution and the studio environment, including equipment and materials, 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 for a maximum of 6 units. (Formerly PHOT 44)
Transfer Credit: CSU

PHOT 234
PORTFOLIO DEVELOPMENT 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 102 or equivalent with a grade of Credit or "C" or higher.
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. (Formerly PHOT 38)
Transfer Credit: CSU

PHOT 240
EXPERIMENTAL PHOTOGRAPHY 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 100 or equivalent with a grade of Credit or "C" or higher or equivalent.
This class is designed to explore black and white photographic materials through a non-traditional process. Topics covered include infrared film, chemical painting, toners, hand-coloring, reticulation emulsion transfers, and others. Emphasis is placed on using process as communicative content. (Formerly PHOT 36)
Transfer Credit: CSU

PHOT 242
NON-SILVER PHOTOGRAPHY 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 100 or equivalent with a grade of Credit or "C" or higher.
This course explores historical and photographic processes (printing-out processes) which utilize hand-applied emulsions and large contact negatives in the production of photographic imagery. Emphasis is placed on the use of process for communicative content. (Formerly PHOT 39)
Transfer Credit: CSU

PHOT 250
CONTEMPORARY PHOTOGRAPHIC EXPRESSION 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 100 or equivalent with a grade of Credit or "C" or higher.
This course is an in-depth study of the use of visual language for contemporary photographic expression. Imagery is stressed, with process used as the tool for achieving a particular expression. Students will explore photographic genres, as well as discover the uniqueness of their own approach through the creation of a personal body of work. (Formerly PHOT 37)
Transfer Credit: CSU; UC

PHOT 252
PHOTOGRAPHY OF THE NATURAL ENVIRONMENT 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 100 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course examines the interpretation of the natural environment through the medium of photography. Environmental issues and theories of photographic approaches to the natural world are stressed. Topics include film types, exposure techniques, appropriate equipment and care, field conditions, and printing techniques. This course may be taken for a maximum of 6 units. (Formerly PHOT 46)
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
SPORTS OFFICIATING SURVEYED. (Formerly PE 1)
FOR FOOTBALL 1 UNIT
(HPER/Athletics Division)

PE 101B
SPORTS OFFICIATING FOR MEN’S AND WOMEN’S BASKETBALL 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to give the student a detailed study of the techniques of officiating men’s and women’s basketball.
Transfer Credit: CSU

PE 102
SPORTS OFFICIATING FOR MEN’S ACTIVITIES II 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is an in-depth study of the mechanics and rules of officiating baseball.
Transfer Credit: CSU

PE 102A
SPORTS OFFICIATING FOR BASEBALL 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to give the student a detailed study of the techniques of officiating baseball.
Transfer Credit: CSU

PE 102B
SPORTS OFFICIATING FOR MEN’S AND WOMEN’S TRACK AND FIELD 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is an in-depth study of the organization and techniques of officiating track and field.
Transfer Credit: CSU

PE 103
SPORTS OFFICIATING FOR WOMEN’S ACTIVITIES I 2 UNITS
Class hours: 2 lecture
Prerequisite: None
Corequisite: None.
Recommendation: None.
This course is designed to give the student a detailed study of the techniques of officiating women’s athletic activities. This course prepares the student to take the authorized N.A.G.W.S. examination (written and practical) which is necessary to obtain an official rating. Sports included are softball, soccer and speed-a-way, tennis, badminton, and track and field. (Formerly PE 3.2)
Transfer Credit: CSU

PE 104
SPORTS OFFICIATING FOR WOMEN’S ACTIVITIES II 2 UNITS
Class hours: 2 lecture
Prerequisite: None
This course is designed to give the student a detailed study of the techniques of officiating women’s athletic activities. This course prepares the student to take the authorized N.A.G.W.S. examination (written and practical) which is necessary to obtain an official rating. Sports included are softball, soccer and speed-a-way, tennis, badminton, and track and field. (Formerly PE 3.2)
Transfer Credit: CSU

Announcement of Courses
Announcement of Courses

PE 255 PHYSICAL EDUCATION PROGRAMS AND PRINCIPLES OF CONDITIONING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will provide the student with basic knowledge and principles related to exercise prescription. Students will develop the skills necessary to design and implement training programs as they relate to the components of fitness. Safeguards and effectiveness for all levels of fitness will be addressed.
Transfer Credit: CSU

PE 260 ATHLETIC INJURY ASSESSMENT AND RECONDITIONING 2 UNITS
Class hours: 2 lecture
Prerequisite: PE 107 with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course allows the student to expand upon the knowledge of the mechanism, assessment and reconditioning of athletic injuries. Emphasis is placed upon injury mechanism and assessment, the phases of healing, modalities used in the healing process, and the application of exercise and exercise equipment in the reconditioning of athletic injuries.
Transfer Credit: CSU

PE 261 ATHLETIC INJURY TAPING, BANDAGING AND IMMobilIZATION 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: PE 107 with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
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

PHYSICAL EDUCATION ACTIVITIES

PRE-PROFESSIONAL ACTIVITIES

PE 108 PROFESSIONAL ACTIVITIES FOR MEN’S SPORTS I 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: None.
Emphasis will be on the theory and practice of football and basketball. The course presents the fundamental knowledge of the sports through techniques of lecture, discussion, and practice. (Formerly PE 10.1)
Transfer Credit: CSU; UC

PE 109 TRACK AND FIELD 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
This course is designed to introduce the basic fundamentals of coaching the events in track and field. (Formerly PE 10.2)
Transfer Credit: CSU; UC

PE 110 THEORY OF FOOTBALL 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course gives students an understanding of how to coach and teach the skills, principles, and philosophy of offensive and defensive football. (Formerly PE 97.1/PE 10.4)
Transfer Credit: CSU; UC

PE 112 PROFESSIONAL ACTIVITIES FOR CO-ED SPORTS I 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: None.
This course is designed to present the theory and practice of water safety and life saving techniques. It leads to American Red Cross Advanced Life Saving and Water Safety Certificate. This course is recommended for all physical education, recreation, and recreation aide majors, but is open to other interested students. (Formerly PE 12.1)
Transfer Credit: CSU; UC

Transfer Credit: CSU

PROFESSIONAL ACTIVITIES FOR MODERN DANCE 3 UNITS
Class hours: 5 hrs lecture/activity
Prerequisite: None.
This course is designed to give prospective teachers of physical education a comprehensive background in the theory and techniques of modern dance. (Formerly PE 12.5)
Transfer Credit: CSU; UC

PE 117 PROFESSIONAL ACTIVITIES FOR WOMEN’S SPORTS I 3 UNITS
Class hours: 5 hrs lecture/activity
Prerequisite: None.
This course is designed to teach the theory and practice of volleyball, basketball, field hockey, and flag football. (Formerly PE 14.1)
Transfer Credit: CSU; UC

PE 118 PROFESSIONAL ACTIVITIES FOR WOMEN’S SPORTS II 3 UNITS
Class hours: 5 hrs lecture/activity
Prerequisite: None.
The course is designed to teach the theory and practice of softball, soccer, speed-a-way, and track and field. (Formerly PE 14.2)
Transfer Credit: CSU; UC

Transfer Credit: CSU

PHYSICAL EDUCATION ACTIVITIES

All physical education activities classes may be repeated for credit. Students are urged to participate in a variety of courses which will give them a well-rounded schedule of vigorous activity combined with life-time sports which will have carry-over value. Students may take any P.E. activity class on a credit/no credit basis. It is the responsibility of the student to apply for this sometime during the first four weeks of each semester.

PE 2 (Not degree applicable)
INDIVIDUALIZED ATHLETIC DEVELOPMENT 0 UNIT
Class hours: 3 lab/Open entry/open exit (17 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to provide students the individualized opportunity to acquire and practice the athletic skills necessary for enhanced participation in their sport or activity of choice. (Formerly PE 91)
PE 3
(Not degree applicable)
INDIVIDUALIZED DANCE
DEVELOPMENT
0 UNIT
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to provide students with an opportunity to qualify for the American Red Cross to provide certification. Relaxation techniques and stretching movements will be utilized in presenting aquatic activities and advanced swimming skills. The course may be taken for a maximum of 6 units. (Formerly PE 21.2)
Transfer Credit: CSU; UC

PE 125
WATER SAFETY
INSTRUCTOR (WSI)
2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: PE 150B or equivalent, 17 years of age or older and CPR card. Competence in fundamentals of backstroke, sidestroke, breaststroke, crawl and diving. This course is offered with the authorization of the American Red Cross to provide students with Personal Instructor Candidate Training (PITC), along with the Water Safety Instructor (WSI). It is a comprehensive analysis of principles of movement, organizational strategies utilized in presenting aquatic activities and advanced swimming skills. It also includes an opportunity to qualify for the American Red Cross Water Safety Instructor certification. This course may be taken for a maximum of 8 units. (Formerly PE 21.2)
Transfer Credit: CSU; UC

PE 130
STRETCHING AND RELAXATION
1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course emphasizes the development of flexibility in muscles and joints to prevent injury and improve posture and body alignment. Relaxation techniques and stretching improve general wellness as they become part of lifestyle. This course may be taken for a maximum of 4 units. (Formerly PE 30.2)
Transfer Credit: CSU; UC

PE 131
WALKING FOR FITNESS
1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will emphasize instruction and practice of walking techniques for speed, distance and endurance. Information on aerobic conditioning, heart rate, stretching and stress reduction will be covered. This course may be taken for a maximum of 4 units. (Formerly PE 30.4)
Transfer Credit: CSU; UC

PE 132A
LOW IMPACT AEROBICS
1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: None.
Student will receive practical instruction in ways to improve their cardiovascular endurance, flexibility and body composition through various low impact aerobic activities. Lectures may include the areas of basic nutrition, body composition, posture analysis and principles of safe and effective exercise. This course may be taken for a maximum of 6 units. (Formerly PE 33.1)
Transfer Credit: CSU; UC

PE 132B
AEROBIC ACTIVITIES
1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: None.
This course is designed to meet the needs of students who want practical instruction in ways to improve their cardiovascular endurance and flexibility through various aerobic activities and stretching movements. Lectures may include areas of basic nutrition, body composition, posture analysis and principles of safe and effective exercise. This course may be taken for a maximum of 6 units. (Formerly PE 33.2)
Transfer Credit: CSU; UC

PE 133
STEP AEROBICS
1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed as a contemporary workout to improve each participant’s strength and cardiovascular fitness level through steady-state stepping movements that will improve health. Students will be exposed to a graduated, continuous system of rhythmic stepping at various platform heights, emphasizing strength, flexibility, and endurance. This course will include proper body alignment and mechanics, basic nutrition, injury prevention, strength training, and personal fitness assessment. This course may be taken for a maximum of 6 units. (Formerly PE 33.3)

PE 134
WATER AEROBICS
1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This water aerobics exercise class emphasizes development of cardiorespiratory endurance, flexibility and muscle tone. No swimming skills are required. This course may be taken for a maximum of 2 units. (Formerly PE 33.4)
Transfer Credit: CSU; UC

PE 135A
CIRCUIT WEIGHT TRAINING,
BEGINNING
1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
This course covers the fundamentals and techniques of circuit weight training with the use of machines, barbells, dumbbells, jump ropes, and other equipment in the development of an improved level of fitness and physical condition. This course may be taken for a maximum of 2 units. (Formerly PE 31.1)
Transfer Credit: CSU; UC

PE 135B
CIRCUIT WEIGHT TRAINING,
INTERMEDIATE/ADVANCED
2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
This course will consist of applied theory as well as physical conditioning. Students will use three types of exercise to reach goals: Isotonic, Isometric, and Isokinetic. Individual instruction will be given along with the discussion of strengths, weaknesses, and nutritional needs of each individual. This course may be taken for a maximum of 4 units. (Formerly PE 31.4)
Transfer Credit: CSU; UC

PE 138
YOGA
1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is an introduction to Yoga based on basic yoga practices and principles. Instruction will include yoga postures, guided relaxation, and breathing practices. Benefits of yoga include increased flexibility, strength, balance, and body awareness, as well as stress reduction. This course may be taken for a maximum of 4 units. (Formerly PE 30.3)
Transfer Credit: CSU; UC
**PE 139**  
**PILATES CONDITIONING**  1 UNIT  
Class hours: 0.5 lecture/1.5 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course is designed to provide a physical and mental conditioning program involving exercises based on the Pilates technique. These exercises are designed to increase body awareness by increasing circulation, flexibility, and muscular strength.  
Transfer Credit: CSU

**PE 141**  
**FITNESS AND WELLNESS**  3 UNITS  
Class hours: 2 lecture/3 lab  
Prerequisite: None.  
This course is designed to cover topics related to health and wellness including principles of fitness, nutrition, coronary heart disease, and stress management. An exercise lab will include pre-and-post assessment of each student's fitness components such as cardiovascular fitness, muscular strength and endurance, flexibility and body composition. Individualized exercise prescription is established for each student to improve his/her fitness components. Progress is monitored throughout the semester. This course may be taken for a maximum of 6 units. (Formerly PE 30.8)  
Transfer Credit: CSU; UC

**PE 142**  
**FITNESS AND WELLNESS**  2 UNITS  
Class hours: 1 lecture/2 lab  
Prerequisite: Medical Clearance from Physician.  
This course is designed for older adults and includes an exercise program consisting of mild cardiovascular, stretching, and weight lifting activities. Testing is provided to determine a physical assessment of the individual for cardiovascular fitness, body composition, strength, and flexibility. Students establish their own training program and participate in the above activities, based on the recommended exercise prescription. Lectures provide information on nutrition, stress management, conditioning, and diet related to the special interests, and diet needs of the aging and older adults. This course may be taken for a maximum of 4 units. (Formerly PE 30.7)  
Transfer Credit: CSU; UC

**PE 143**  
**PERSONAL FITNESS PROGRAM**  1 UNIT  
Class hours: 0.5 lecture/1.5 lab  
Prerequisite: None.  
This course is designed as an exercise program consisting of cardio-respiratory, stretching, weight training activities. Testing will be provided to determine physical assessment and improvement in the areas of flexibility, strength, endurance, aerobic fitness, and body composition. Each student will establish and practice his or her training program based on recommended exercises. This course may be taken for a maximum of 2 units. (Formerly PE 30.8)  
Transfer Credit: CSU; UC

**PE 144L**  
**EXERCISE PHYSIOLOGY LABORATORY TECHNIQUES**  2 UNITS  
Class hours: 1 lecture/2 lab  
Prerequisite: None.  
This course offers individuals a background in exercise testing. Discussions will include the scientific bases for the exercise tests. (Formerly PE 69.7/PE 30.9)  
Transfer Credit: CSU; UC

**PE 145**  
**BASIC TRAINING AND PHYSICAL CONDITIONING**  1 UNIT  
Class hours: 0.5 lecture/2.5 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This is a high-energy course incorporating sport-specific activities and physical drills. Training will improve sports performance, as well as have a conditioning effect. Participants entering this class should be at an intermediate to advanced fitness level. This class may be taken for a maximum of 4 units. (Formerly PE 135)  
Transfer Credit: CSU

**PE 146**  
**WEIGHT MANAGEMENT**  1.5 UNITS  
Class hours: 1 lecture/1.5 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course is designed to provide strategies for weight management. It will include discussion in the physical, emotional, and nutritional components of a successful weight management plan and provide the opportunity for each student to establish and practice an individualized program. This course may be taken for a maximum of 6 units.  
Transfer Credit: CSU

**PE 150A**  
**SWIMMING, BEGINNING**  1 UNIT  
Class hours: 0.5 lecture/1.5 lab  
Prerequisite: None.  
Fundamental swimming strokes, elementary diving and water safety. This course may be taken for a maximum of 2 units. (Formerly PE 20.1)  
Transfer Credit: CSU; UC

**PE 150B**  
**SWIMMING, INTERMEDIATE/ADVANCED**  2 UNITS  
Class hours: 1 lecture/3 lab  
Prerequisite: None.  
Intensive drill in backstroke, sidestroke, breaststroke and crawl. Fundamentals of diving and water polo. This course may be taken for a maximum of 4 units. (Formerly PE 20.3)  
Transfer Credit: CSU; UC

**PE 151**  
**WRESTLING, BEGINNING**  1 UNIT  
Class hours: 0.5 lecture/1.5 lab  
Prerequisite: None.  
This course is designed to provide instruction and practice in the fundamentals of wrestling. This course may be taken for a maximum of 4 units. (Formerly PE 31.8)  
Transfer Credit: CSU; UC

**PE 153A**  
**BACKPACKING, BEGINNING**  2 UNITS  
Class hours: 1 lecture/3 lab with one three-day field trip.  
Prerequisite: None.  
This course provides the student with the knowledge and skills necessary for all-season, off-trail backpacking. A backpack trip of at least three days at the end of the course will be required. Student will be expected to furnish their own backpacking equipment. This course may be taken for a maximum of 4 units. (Formerly PE 40.4)  
Transfer Credit: CSU; UC

**PE 153B**  
**BACKPACKING, ADVANCED**  2 UNITS  
Class hours: 1 lecture/2 lab with two 4+ A6 day field trips or one 9 day field trip.  
Prerequisite: PE 153A or equivalent with a grade of Credit or "C" or higher.  
This course is designed to provide the student with advanced skills and knowledge used in extensive all-season, cross-country backpacking. Emphasis will be placed on survival and navigational skills. Two trips of 4 1/2 days (or one 9-day trip in summer
### Announcement of Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 154A</td>
<td>BADMINTON, BEGINNING</td>
<td>1</td>
<td>For students looking to improve skills and techniques. Emphasis on fundamentals and court strategy. Intra-class competition will be held. Suitable for beginners. (Formerly PE 40.7)</td>
</tr>
<tr>
<td>PE 156A</td>
<td>GOLF, BEGINNING</td>
<td>1</td>
<td>Teaches fundamental techniques of grip, alignment, stance and swing. This course aims to teach the basics of golf. Transfer Credit: CSU; UC</td>
</tr>
<tr>
<td>PE 156B</td>
<td>GOLF, INTERMEDIATE/ADVANCED</td>
<td>2</td>
<td>Designed for those wishing to develop and improve their golf skills. Focuses on specific attitudes, knowledge and skills useful in self defense. (Formerly PE 40.15)</td>
</tr>
<tr>
<td>PE 158A</td>
<td>RACQUETBALL, BEGINNING</td>
<td>1</td>
<td>Emphasis on fundamental strokes, techniques of playing, rules and strategy for doubles, singles, and &quot;cutthroat&quot; play. Suitable for beginners. (Formerly PE 40.25)</td>
</tr>
<tr>
<td>PE 158B</td>
<td>RACQUETBALL, INTERMEDIATE/ADVANCED</td>
<td>2</td>
<td>Designed for those wishing to increase skills in tennis. Improves form, strokes, and serves. Suitable for players wishing to improve their competitive skills. (Formerly PE 40.34)</td>
</tr>
</tbody>
</table>

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
PE 171A  
SOFTBALL  1 UNIT  
Class hours: 0.5 lecture/1.5 lab  
Prerequisite: None.  
This course is designed to provide students with the knowledge and practical skills necessary to effectively participate in softball. This course may be taken for a maximum of 2 units. (Formerly PE 40.32)  
Transfer Credit: CSU; UC

PE 171B  
SOFTBALL, INTERMEDIATE/ADVANCED  2 UNITS  
Class hours: 1 lecture/3 lab  
Prerequisite: None.  
This course is designed to provide students with advanced knowledge and practical skills necessary to effectively participate in Fast Pitch softball. Emphasis will be placed on skills which will prepare the students to compete on the intercollegiate softball team. This course may be taken for a maximum of 4 units. (Formerly PE 40.33)  
Transfer Credit: CSU; UC

PE 171C  
SLOW-PITCH SOFTBALL  1 UNIT  
Class hours: 0.5 lecture/1.5 lab  
Prerequisite: None.  
This course is designed to provide students with advanced knowledge and practical skills necessary to effectively participate in slow-pitch softball. In slow-pitch softball the ball is thrown slowly, traveling in an arc. This course may be taken for a maximum of 2 units. (Formerly PE 40.31)  
Transfer Credit: CSU; UC

PE 172A  
VOLLEYBALL, BEGINNING  1 UNIT  
Class hours: 0.5 lecture/1.5 lab  
Prerequisite: None.  
This course is designed to develop the students' understanding of the basic fundamentals of volleyball by instruction and practice in setting, passing, hitting and team play. This course may be taken for a maximum of 2 units. (Formerly PE 40.37)  
Transfer Credit: CSU; UC

PE 172B  
VOLLEYBALL, INTERMEDIATE/ADVANCED  2 UNITS  
Class hours: 1 lecture/3 lab  
Prerequisite: None.  
A course designed for students wishing to improve form, learn advanced skills and court strategies in volleyball. Intra-class competition will be held. This course may be taken for a maximum of 4 units. (Formerly PE 40.39)  
Transfer Credit: CSU; UC

PE 175A  
BASEBALL, BEGINNING  1 UNIT  
Class hours: 0.5 lecture/1.5 lab  
Prerequisite: None.  
This course is designed to present the fundamental techniques, rules and etiquette of the sport of baseball. This course may be taken for a maximum of 2 units. (Formerly PE 50.1)  
Transfer Credit: CSU; UC

PE 175B  
BASEBALL, INTERMEDIATE/ADVANCED  2 UNITS  
Class hours: 1 lecture/3 lab  
Prerequisite: None.  
The course is designed to improve individual techniques for baseball players. Team competitive play situations will be provided in order to increase students' skills, knowledge, and strategy. This course may be taken for a maximum of 4 units. (Formerly PE 50.3)  
Transfer Credit: CSU; UC

PE 176A  
BEGINNING BASKETBALL  1 UNIT  
Class hours: 0.5 lecture/1.5 lab  
Prerequisite: None.  
This course will include instruction and practice in shooting, passing, offensive play, individual and team defense. This course may be taken for a maximum of 2 units. (Formerly PE 50.4)  
Transfer Credit: CSU; UC

PE 176B  
BASKETBALL, ADVANCED  2 UNITS  
Class hours: 1 lecture/3 lab  
Prerequisite: None.  
Team competitive play situations will be provided in order to increase students' skills, knowledge, and strategy. This course may be taken for a maximum of 4 units. (Formerly PE 50.6)  
Transfer Credit: CSU; UC

PE 177  
FLAG FOOTBALL  1 UNIT  
Class hours: 0.5 lecture/1.5 lab  
Prerequisite: None.  
This course is designed to teach the fundamental theory and skills involved in the game of flag football. This course may be taken for a maximum of 4 units. (Formerly PE 50.10)  
Transfer Credit: CSU; UC

PE 178  
FOOTBALL, INTERMEDIATE/ADVANCED  2 UNITS  
Class hours: 1 lecture/3 lab  
Prerequisite: None.  
This course is designed to teach individual techniques of offense and defense in football. It is recommended for physical education majors and those interested in varsity competition. This course may be taken for a maximum of 8 units. (Formerly PE 50.12)  
Transfer Credit: CSU; UC

PE 179A  
SOCCER, BEGINNING  1 UNIT  
Class hours: 0.5 lecture/1.5 lab  
Prerequisite: None.  
This class is designed to introduce theory and practice in the fundamental skills and techniques of soccer. Proper conditioning will be stressed. This course may be taken for a maximum of 2 units. (Formerly PE 50.13)  
Transfer Credit: CSU; UC

PE 179B  
SOCCER, INTERMEDIATE/ADVANCED  2 UNITS  
Class hours: 1 lecture/3 lab  
Prerequisite: None.  
Must demonstrate some knowledge of basic soccer skills. This course is designed to deal with advanced techniques, skills, and tactics for soccer players. It is recommended for those interested in varsity competition. This course may be taken for a maximum of 4 units. (Formerly PE 50.15)  
Transfer Credit: CSU; UC

PE 180  
INTRODUCTION TO DANCE MOVEMENT  3 UNITS  
Class hours: 2 lecture/3 lab  
Prerequisite: None.  
Students will study dance movement in three basic styles: ballet, modern and jazz. For each form, proper body alignment, stretching and styling techniques will be presented in a dance class format. This includes warm-ups, progressions and dance combinations. This course may be taken for a maximum of 12 units. (Formerly PE 45)  
Transfer Credit: CSU; UC

PE 181  
INTRODUCTION TO DANCE CULTURES OF THE WORLD  2 UNITS  
Class hours: 4 activity  
Prerequisite: None.
Students will study dance styles representative of different cultures and nationalities. Introduction to many different dance forms will be explored, taking into consideration historical background, related folklore and how dance differs from culture to culture. This course may be taken for a maximum of 4 units. (Formerly PE 45.12)
Transfer Credit:CSU;UC

PE 182A
DANCE, MODERN, BEGINNING 2 UNITS
Class hours:1 lecture/3 lab
Prerequisite: None.
Students will study the expressive body movements in a creative art form. Emphasis will be on developing modern dance skills and technique as well as conditioning the body by improving posture, flexibility, strength, and coordination. This course may be taken for a maximum of 4 units. (Formerly PE 45.10)
Transfer Credit:CSU;UC

PE 182B
DANCE, MODERN, INTERMEDIATE 2 UNITS
Class hours:1 lecture/3 lab
Prerequisite: None.
Students will study intermediate level modern skills and will utilize basic movement and music principles to choreograph dance sequences. This course may be taken for a maximum of 4 units. (Formerly PE 45.12)
Transfer Credit:CSU;UC

PE 183
DANCE PRODUCTION 2 UNITS
Class hours:4 activity
Prerequisite: None.
Students will study the elements of dance production such as choreography, lighting, design, costume design, music, and concert publicity. Students will choreograph and perform in the concert or work backstage as part of the technical crew. This course may be taken for a maximum of 8 units. (Formerly PE 45.13)
Transfer Credit:CSU;UC

PE 184
CHOREOGRAPHY 2 UNITS
Class hours: 4 lab
Prerequisite: None.
Students will study the elements of dance composition as well as learn about well known choreographers and their work. The study will include the selection of movement appropriate to the meaning of a dance, the arrangements of movement in space, and the overall design of the dance and its staging. This course may be taken for a maxi mum of 4 units. (Formerly PE 45.14)
Transfer Credit:CSU;UC

PE 185
PARTNERING FOR DANCE 2 UNITS
Class hours:1 lecture/3 lab
Corequisite: None.
Students will study partner dancing involving groups of two or more dancers. It will serve as an introduction to the art of partnering in modern, jazz, and classical choreography. Not limited to male/female partnering, students will study choreography involving any body contact or shifting of weight from one individual to another. This course may be taken for a maximum of 4 units. (Formerly PE 45.15)
Transfer Credit:CSU;UC

PE 186A
BEGINNING BALLET 2 UNITS
Class hours:1 lecture/3 lab
Prerequisite: None.
Students will study basic ballet terminology and technique. Emphasis is on body alignment, coordination and musicality. This course may be taken for a maximum of 4 units. (Formerly PE 45.17)
Transfer Credit:CSU;UC

PE 186B
INTERMEDIATE BALLET 2 UNITS
Class hours:1 lecture/3 lab
Prerequisite: None.
Students will study the advanced terminology and technique of classical ballet. This course may be taken for a maximum of 4 units. (Formerly PE 45.18)
Transfer Credit:CSU;UC

PE 187
DANCE REPERTORY 2 UNITS
Class hours: 4 lab
Prerequisite: None.
Students will study a repertory of dances in the styles of ballet, modern, jazz, ethnic, and dance theatre. The advanced student will participate in performances on campus as well as in the community. This course may be taken for a maximum of 8 units. (Formerly PE 46)
Transfer Credit:CSU;UC

PE 188
DANCE PERFORMANCE 2 UNITS
Class hours: 4 lab/rehearsal.
Prerequisite: None.
Students will study the aspects of dance performance through participation in the semester dance concert. Emphasis is placed on improving classroom dance technique and elevating skills to a performance level. This course may be taken for a maximum of 8 units. (Formerly PE 46.1)
Transfer Credit:CSU;UC

PE 189
DANCE WORKSHOP 2 UNITS
Class hours: 4 lab
Prerequisite: None.
Students will study the technical dance skills in ballet, jazz and modern dance. The course includes exploration of the elements of composition and affords the opportunity to experiment with improvisation and set choreography. Students will work on individual and group projects and participate in the faculty dance concert. This course may be taken for a maximum of 8 units. (Formerly PE 46.2)
Transfer Credit:CSU;UC

PE 190
DANCE NOTATION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Students will study basic dance notation with in-depth work in elementary Labanotation and an introduction to Benesh and Kinesography notation systems. These systems are taught by using graphs, musical scores, and stick figures or drawings. (Formerly PE 46.3)
Transfer Credit:CSU;UC

PE 191
HISTORY OF DANCE 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Students will study dance history from ancient to modern times, beginning with tribal, ethnic and folk dance and on through contemporary ballet, modern and jazz dance. (Formerly PE 46.4)
Transfer Credit:CSU;UC

PE 192
DANCE AND DIGITAL TECHNOLOGY 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
The student will study how technology has historically and traditionally been used in the field of dance. Emphasis will be placed on the various technologies that currently impact the art of dance. The majority of topics in the course will be related to the art of dance.
Transfer Credit:CSU
Announcement of Courses

PE 201
BASEBALL OFF-SEASON CONDITIONING 2 UNITS
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to provide the physical training and preparation to become a competitive baseball athlete. Muscular balance for position specific needs is attained through principles ranging from interval training to resistance training. This course will improve strength, flexibility, endurance and agility. This course may be taken for a maximum of 8 units. (Formerly PE 50.2)
Transfer Credit: CSU; UC

PE 207
CROSS COUNTRY CONDITIONING 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course presents techniques for cross country preseason conditioning and training. This course may be taken for a maximum of 4 units. (Formerly PE 31.6)
Transfer Credit: CSU; UC

PE 211
FOOTBALL CONDITIONING (OLYMPIC WEIGHTS - POWER LIFTING) 2 UNITS
Class hours: 1 lecture/3 lab
Corequisite: None.
This course is designed to prepare students for athletic competition in football. It is an intensive power training program based on the overload principle. This course uses olympic weights in a structured program that primarily builds power. It does not use isometric or cardio-vascular training. This course may be taken for a maximum of 8 units. (Formerly PE 41.1)
Transfer Credit: CSU; UC

PE 212
FOOTBALL TRAINING AND TECHNIQUES 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Corequisite: None.
This course will consist of in-season conditioning, theory of play, opponent evaluation, and goal setting for football. The student will be instructed in each of the above to develop a successful physical and mental approach to weekly contests. This course may be taken for a maximum of 4 units. (Formerly PE 50.11)
Transfer Credit: CSU; UC

PE 222
SOFTBALL PRE-SEASON CONDITIONING 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
The training and preparation to become a competitive softball athlete involves more than the learning of basic skills. This course will include aerobic conditioning, strength and flexibility conditioning and agility skills. This course may be taken for a maximum of 4 units. (Formerly PE 40.42)
Transfer Credit: CSU; UC

PE 228
TENNIS CONDITIONING 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Corequisite: None.
This course is designed to cover the following three areas: 1) analysis and training of tennis 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 for a maximum of 4 units. (Formerly PE 31.5)
Transfer Credit: CSU; UC

PE 234
TRACK AND FIELD CONDITIONING 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
The techniques and training of track and field events are combined in a preseason conditioning program during the fall of the year. This course may be taken for a maximum of 4 units. (Formerly PE 31.5)
Transfer Credit: CSU; UC

PE 236
VOLLEYBALL PRE-SEASON CONDITIONING 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Corequisite: None.
This course is designed to cover the following three areas: 1) analysis and training of volleyball skills including specialized positions, 2) analysis of various team offensive and defensive systems, and 3) physical conditioning including jump training, strength training and aerobic conditioning. This course may be taken for a maximum of 4 units. (Formerly PE 40.40)
Transfer Credit: CSU; UC

PE 238
WRESTLING OFF SEASON TRAINING 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to provide the physical training and preparation to become a competitive college wrestler. It will be an intensive power-training program based on the overload principle. The course will improve strength, flexibility, and endurance. This course may be repeated for a maximum of 8 units.
Transfer Credit: CSU

INTERCOLLEGIATE ATHLETICS

PE 137
SONG UNIT 2 UNITS
Class hours: 6 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to develop, improve and implement the skills necessary to be an effective songleader at the community college level. This course may be taken for a maximum of 8 units. (Formerly PE 92.1)
Transfer Credit: CSU

PE 245
PEP UNIT 2 UNITS
Class hours: 6 lab
Prerequisite: None.
Corequisite: None.
This course is designed to develop, improve and implement the skills necessary to be an effective cheerleader at the community college level. This course may be taken for a maximum of 8 units. (Formerly PE 92)
Transfer Credit: CSU

PE 200
BASEBALL 3 UNITS
Class hours: 10 hrs per week - Daily practice
Prerequisite: None.
This course is designed to develop the student for intercollegiate competition in baseball. Skill techniques, good sportsmanship, team play, and strategy will be emphasized. This course may be taken for a maximum of 12 units. (Formerly PE 72)
Transfer Credit: CSU; UC

PE 202
BASKETBALL, MEN 3 UNITS
Class hours: 10 hrs per week - Daily practice
Prerequisite: None.
Training for intercollegiate competition in basketball. This course may be taken for a maximum of 12 units. (Formerly PE 73.1)
Transfer Credit: CSU; UC

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 204</td>
<td>BASKETBALL, WOMEN</td>
<td>3</td>
<td>Opportunity to participate in this competition. This course may be taken for a maximum of 12 units. (Formerly PE 76) Transfer Credit: CSU; UC</td>
</tr>
<tr>
<td>PE 217</td>
<td>SOCCER, MEN</td>
<td>3</td>
<td>This course will provide training for intercollegiate competition in men's soccer. Proper warm-up exercises and conditioning will be emphasized. This course may be taken for a maximum of 12 units. (Formerly PE 84.2) Transfer Credit: CSU; UC</td>
</tr>
<tr>
<td>PE 219</td>
<td>SOCCER, WOMEN</td>
<td>3</td>
<td>This course will provide training for intercollegiate competition in women's soccer. Proper warm-up exercises and conditioning will be emphasized. This course may be taken for a maximum of 12 units. (Formerly PE 84.1) Transfer Credit: CSU; UC</td>
</tr>
<tr>
<td>PE 221</td>
<td>SOFTBALL, WOMEN</td>
<td>3</td>
<td>This course will provide training for intercollegiate competition in women's softball. Proper warm-up exercises and conditioning will be emphasized. This course may be taken for a maximum of 12 units. (Formerly PE 81) Transfer Credit: CSU; UC</td>
</tr>
<tr>
<td>PE 223</td>
<td>SWIMMING, MEN</td>
<td>3</td>
<td>This course will provide training for intercollegiate competition in swimming. Emphasis will be on conditioning and stroke analysis. This course may be taken for a maximum of 12 units. (Formerly PE 82.2) Transfer Credit: CSU; UC</td>
</tr>
<tr>
<td>PE 235</td>
<td>VOLLEYBALL, WOMEN</td>
<td>3</td>
<td>This course will provide training for intercollegiate competition in volleyball. Emphasis will be on conditioning and learning competitive strategy. This course may be taken for a maximum of 12 units. (Formerly PE 83.1) Transfer Credit: CSU; UC</td>
</tr>
</tbody>
</table>

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This course is designed to provide training for intercollegiate competition in women's volleyball. It involves daily practice of two hours plus an intercollegiate match schedule. Conditioning for tournament play will be stressed. This course may be taken for a maximum of 12 units. (Formerly PE 86) Transfer Credit: CSU; UC

PE 241
WATER POLO - WOMEN 3 UNITS
Class hours: 10 hrs per week - Daily practice
Prerequisite: None.
Corequisite: None.
Training for intercollegiate competition in water polo. This course may be taken for a maximum of 12 units. (Formerly PE 86) Transfer Credit: CSU; UC

PE 243
WRESTLING 3 UNITS
Class hours: 10 hrs per week - Daily practice
Prerequisite: None.
This course is designed to provide training for intercollegiate competition in wrestling. Individual skills, proper conditioning, and warm-up exercises will be emphasized. This course may be taken for a maximum of 12 units. (Formerly PE 87) Transfer Credit: CSU; UC

SPECIAL PHYSICAL EDUCATION ACTIVITIES

PE 120
SEDENTARY ACTIVITIES FOR STUDENTS WITH DISABILITIES 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Recommendation: Completed adapted physical education physician health clearance for participation, adapted physical education health history questionnaire, intake interview assessment procedures.
This course is designed for the student who is not able to participate in virtually any physical activity course due to a disability. An individualized sedentary activity program will be tailored to the physical abilities and disabilities of the student. This course may be taken for a maximum of 4 units. (Formerly PE 95.1) Transfer Credit: CSU; UC

PE 121
ADAPTED CARDIOVASCULAR EXERCISE 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Recommendation: Completed adapted physical education physician health clearance for participation, adapted physical education health history questionnaire, intake interview assessment procedure.
This course is designed to develop the general fitness level for the disabled students who may not be placed in a regular activity course. This course may be taken for a maximum of 4 units. (Formerly PE 95.2) Transfer Credit: CSU; UC

PE 122
ADAPTED STRENGTH TRAINING 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Recommendation: Completed adapted physical education physician health clearance for participation, adapted physical education health history questionnaire, intake interview assessment procedures.
This course is designed for the student who is not able to participate in the standard circuit weight training program due to a disability. An individualized weight training program will be tailored to the physical abilities and disabilities of the student. This course may be taken for a maximum of 4 units. (Formerly PE 95.3) Transfer Credit: CSU; UC

PE 123
ADAPTED SWIMMING 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Recommendation: Completed adapted physical education physician health clearance for participation, adapted physical education health history questionnaire, intake interview assessment procedures.
This course is designed for the student who is unable to participate in a regular swimming course due to a disability. Improvement in basic swimming and water safety skills along with other pool activities such as hydroexercises and mobility activities will be included. This course may be taken for a maximum of 4 units. (Formerly PE 95.4) Transfer Credit: CSU; UC

PE 124
WHEELCHAIR ACTIVITIES 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Recommendation: Completed adapted physical education physician health clearance for participation, adapted physical education health history questionnaire, intake interview assessment procedures.
This course is designed to develop the general fitness level for the wheelchair bound student through a variety of modified sport activities. This course may be taken for a maximum of 4 units. (Formerly PE 95.5) Transfer Credit: CSU; UC

PHYSICAL SCIENCE
(Science/Engineering/Math Division)

PS 100
PHYSICAL SCIENCE OF MODERN TECHNOLOGY 3 UNITS
Class hours: 3 lecture
Prerequisite: MATH 40 or equivalent with a grade of Credit or "C" or higher or satisfactory completion of the Math Placement Process.
This is a lecture/demonstration course especially designed to develop an understanding of basic science facts and concepts for non-science majors. Study of the sciences that make our technological world possible will be stressed. (Formerly PS 20) Transfer Credit: CSU; UC

PS 112
PHYSICAL SCIENCE FOR ELEMENTARY SCHOOL TEACHERS 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: MATH 100 or equivalent with a grade of Credit or "C" or higher or satisfactory completion of the Math Placement Process.
Corequisite: None.
Recommendation: None.
This course is an introduction to basic physical science facts and concepts. The physical sciences that make our technological world possible will be studied. This course is designed to give a general introduction to fundamental concepts and to prepare students for teaching at the elementary school level. Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
This course is designed to give the student an initial exposure to physical therapy treatment. Students will practice application of heat and cold modalities, gait and transfer training and chart review under the direction of the physical therapist 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. (Formerly PTA 25.10) Transfer Credit:CSU

PTA 128 PHYSICAL THERAPY ASPECTS OF GROWTH, DEVELOPMENT AND AGING 3 UNITS
Class hours:3 lecture/3 lab
Prerequisite: Acceptance to the Physical Therapist Assistant program and A&P 130 or equivalent with a grade of Credit or "C" or higher.
This course will introduce the student to concepts and physical therapy treatment principles applied to the developmental process from gestation through aging. Emphasis will be placed on neurodevelopmental techniques used for abnormal development and for patients with neurologic or musculoskeletal disorders. (Formerly PTA 28) Transfer Credit:CSU

PTA 230 THERAPEUTIC EXERCISE 4 UNITS
Class hours:3 lecture/3 lab
Prerequisite: PTA 125 or equivalent with a grade of Credit or "C" or higher.
This course is for second year physical therapist assistant majors. Therapeutic exercise introduces the student to the use of exercise as a preventive and treatment mechanism for pathological conditions which influence strength, endurance and flexibility of the human body. Emphasis is placed upon design and application of exercise, developmental sequence of exercise, types of exercise, and the use of exercise equipment. Instruction includes the body’s physiological response to exercise. (Formerly PTA 30) Transfer Credit:CSU

PTA 233 PROSTHETICS AND ORTHOTICS FOR ALLIED HEALTH PROFESSIONALS 2 UNITS
Class hours:2 lecture
Prerequisite: A&P 130 or equivalent with a grade of Credit or "C" or higher.
This course is an introduction to the application of Prosthetics and Orthotic devices in the rehabilitation process of disabled persons. 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. (Formerly PTA 33) Transfer Credit:CSU

Announcement of Courses
for implementation of treatment programs. This course will present clinical instruction activities of daily living training techniques, wheelchair fitting, job mock measurement and professional presentations. (Formerly PTA 40) Transfer Credit: CSU

PTA 245
ADVANCED MODALITIES 3 UNITS
Class hours: 2 lecture/2 lab (Spring only)
Prerequisite: PTA 235 or equivalent with a grade of Credit or “C” or higher.
This course is a study of specific advanced physical therapy procedures which are employed in the physical therapy clinic and which require greater expertise in their application. (Formerly PTA 45)
Transfer Credit: CSU

PTA 246
CLINICAL AFFILIATION 4 UNITS
Class hours: 13 lab (17 wks) (Spring only)
Prerequisite: PTA 230 and PTA 236 or equivalent with grades of Credit or “C” or higher.
Corequisite: PTA 240.
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 outpatient physical therapy settings. Student uniforms are required. This course is offered on a credit/no credit basis only. (Formerly PTA 40.10)
Transfer Credit: CSU

PHYSICS
(Science/Engineering/Math Division)

PHYS 50
PRINCIPLES OF TECHNOLOGY 3 UNITS
Class hours: 2 lecture/2 lab/1 hr. lab arr.
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the Math Placement Process or completion of MATH 40 or MATH 42 or equivalent with a grade of Credit or “C” or higher.
This is an introductory course in principles of physics and its applications in a technological world. It will include applications of physical, mechanical, fluid, electrical and thermal systems. The course includes integrated lab work. (This course is not open to students with credit in PHYS 100 or higher.) (Formerly PHYS 25)

PHYS 100
ELEMENTARY PHYSICS 4 UNITS
Class hours: 3 lecture/1 quiz/2 lab
Prerequisite: MATH 140 or equivalent with a grade of Credit or “C” or higher.
This course is a general survey of the basic principles of physics. It includes mechanics, heat, sound, electricity and magnetism, light, and modern physics with emphasis on mechanics. It is designed primarily as a prerequisite to courses in Engineering Physics. (Formerly PHYS 4.1)
Transfer Credit: CSU; UC

PHYS 101
(CAN PHYS SEQ A) (CAN PHYS 2)
GENERAL PHYSICS 4 UNITS
Class hours: 3 lecture/1 quiz/2 lab
Prerequisite: MATH 140 or equivalent with a grade of Credit or “C” or higher.
This course is designed to give students an understanding and appreciation of the basic principles governing the everyday happenings in the physical environment. The subjects covered are mechanics, heat and sound. (Formerly PHYS 2.1)
Transfer Credit: CSU; UC

PHYS 102
(CAN PHYS SEQ A) (CAN PHYS 4)
GENERAL PHYSICS 4 UNITS
Class hours: 3 lecture/1 quiz/2 lab
(Spring only)
Prerequisite: PHYS 101 or equivalent with a grade of Credit or “C” or higher.
This course is a continuation of PHYS 101. It includes electricity and magnetism, light, and modern physics. (Formerly PHYS 2.2)
Transfer Credit: CSU; UC

PHYS 201
(CAN PHYS SEQ B) (CAN PHYS 8)
ENGINEERING PHYSICS 4 UNITS
Class hours: 3 lecture/1 quiz/2 lab
Prerequisite: PHYS 100 and MATH 170 or equivalent with grades of Credit or “C” or higher.
This is the first course in a three semester sequence designed to meet the requirements for engineering and related majors. Topics to be covered are mechanics, wave motion and sound. (Formerly PHYS 4.1)
Transfer Credit: CSU; UC

PHYS 202
(CAN PHYS SEQ B) (CAN PHYS 12)
ENGINEERING PHYSICS 4 UNITS
Class hours: 3 lecture/1 quiz/2 lab
Prerequisite: PHYS 201 or equivalent with a grade of Credit or “C” or higher.
This course 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. (Formerly PHYS 4.2)
Transfer Credit: CSU; UC

PHYS 203
(CAN PHYS SEQ B) (CAN PHYS 14)
ENGINEERING PHYSICS 4 UNITS
Class hours: 3 lecture/1 quiz/2 lab (Fall only)
Prerequisite: PHYS 201 or equivalent with a grade of Credit or “C” or higher.
This course is a study of heat, light and modern physics. The unit on heat covers such topics as thermometry, calorimetry, the gas laws, thermodynamics and kinetic theory. Optics include geometric and physical optics. Modern physics touches on selected topics such as photoelectric effects, x-ray production and nuclear effects. (Formerly PHYS 4.3)
Transfer Credit: CSU; UC

PLASTICS/COMPOSITES MANUFACTURING TECHNOLOGY
(Engineering Division)

PMT 1 (Not degree applicable)
PLASTICS FUNDAMENTALS 1.5 UNITS
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
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 interest within the plastics manufacturing industry. (Formerly PMT 1.1)

PMT 2 (Not degree applicable)
INJECTION MOLDING FUNDAMENTALS 1.5 UNITS
Class hours: 2 lecture/3 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This class introduces students to basic fundamentals of set-up and operation of injection molding equipment in the plastics and composites industry. Safe handling of all machine operations and hands-on training utilizing current industry equipment is

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emphasized. Students receive training that enables them to apply for entry-level positions in the plastics and composites industry. The course may be taken for a maximum of 3 units. (Formerly PMT 12.9)

**PMT 3** (Not degree applicable)
**PLASTICS REPAIR** 1 UNIT
Class hours: 2 lecture (9 weeks)
Prerequisite: None.
This course will introduce students to the theory and practical application of repair for plastics and composites. The study of repair techniques as well as safety in handling hand tools, power tools, and special plastic repair equipment will be covered. It will prepare students for practical hands-on training to gain experience 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. (Formerly PMT 15)

**PMT 4**
**PLASTICS III** 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: PMT 64 or equivalent with a grade of Credit or “C” or higher.
This course is a specialty course for the advanced plastics student or individuals employed in the plastics industry who 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. (Formerly PMT 31)

**PMT 5** (Not degree applicable)
**SURVEY OF COMPOSITES** 1.5 UNITS
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
This course provides an overview of manufacturing procedures, processing and materials used within the composites industry. The design, construction, and fabrication of laminated parts, as well as related terminology, will be covered. PMT 63L is recommended. (Formerly PMT 69.3/PMT 33)

**PMT 43/44** (Not degree applicable)
**PLASTICS MANUFACTURING TECHNOLOGY OCCUPATIONAL WORK EXPERIENCE** 3-4 UNITS
Class hours: One (1) hour control class each week plus 12.5 hours of employment per week for Plastics work experience 73 or 20 hours of employment per week for Plastics work experience 74. The employment must be in a job related to the student's educational goal.

Corequisite: (1) Enrollment in the Plastics vocational program with 7 or more units including occupational work experience. Work experience/career internship provides the opportunity for Plastics Manufacturing Technology students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to the major and job skills must be completed on the job/training site. These courses may be taken for a maximum of 15-16 units. (Formerly PMT 73/74)

**PMT 50**
**SURVEY OF HYDRAULICS AND PNEUMATICS** 1.5 UNITS
Class hours: 3 lecture/1 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces 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. (Formerly PMT 23.9)

**PMT 51**
**COMPOSITES FABRICATION** 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: PMT 70 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course introduces students to 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. (Formerly PMT 1.2)

**PMT 52**
**MOLDMAKING** 11 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: PMT 65 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course is designed to further extend both the students' skills in plastic injection molding and knowledge of the latest technologies used for mold design 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. (Formerly PMT 32)

**PMT 53**
**COMPOSITES REPAIR** 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: PMT 70 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course 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. (Formerly PMT 36)

**PMT 55**
**SURVEY OF PLASTICS** 1.5 UNITS
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces students to 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. (Formerly PMT 1.2)

**PMT 58**
**INDUSTRIAL DESIGN FOR PLASTICS** 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is for students desiring knowledge of materials and processes used in the field of industrial design and applications. Content includes an overview of plastics technology and lecture/demonstrations in principle processes, including molding, reinforced materials, forming, moldmaking, casting, bonding, laminating, and fabrication. (Formerly PMT 1.5)

**PMT 59**
**INJECTION MOLDING I**  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
This course introduces the student to the fundamentals of set-up and operation of injection molding equipment as found in industry. Training on actual industrial equipment as well as safe material and machinery handling is stressed. This course may be taken for a maximum of 5 units. (Formerly PMT 12)

**PMT 60**
**EXTRUSION**  3 UNITS
Class hours: 2.5 lecture/1.5 lab
Prerequisite: None.
Recommendation: PMT 100 or equivalent with a grade of Credit or "C" or higher.
This course introduces the student to the fundamentals of extrusion and the theory of plastification. Laboratory operation of extruders and extrusion molds are covered. Current industry trends in materials handling, machine operation and how these relate to the manufacturing process are emphasized. (Formerly PMT 13)

**PMT 61**
**FIBERGLASS I**  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Recommendation: PMT 100 or equivalent with a grade of Credit or "C" or higher.
This is a course in the industrial use of fiberglass resins, cloth, mat and composite materials. The care and use of equipment (fibre glass chop pen, gel-coat spray gun) is stressed. Other areas explored are mold laminating, repair, and proper use of resins and fillers. Mixing of resins and safety procedures are emphasized. This course may be taken for a maximum of 5 units. (Formerly PMT 14)

**PMT 62**
**PLASTIC PACKAGING**  2 UNITS
Class hours: 4 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.

This course introduces students to the theory and practical methods of plastic packaging. Areas of concentration are on plastic materials, processing applications and equipment used in consumer and industrial packaging. Material identification and plastic material recycling are also covered. (Formerly PMT 17)

**PMT 63L**
**SPECIALTY PLASTICS LAB**  0.5 UNIT
Class hours: 3 lab (9 weeks)
Prerequisite: None.
This is a lab course to complement other courses in the Plastic/Composite curriculum. It is designed to give practical experience in working with plastics and fiberglass materials. This course may be taken for a maximum of 2 units. (Formerly PMT 19)

**PMT 64**
**PLASTICS II**  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: PMT 100 or equivalent with a grade of Credit or "C" or higher.
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. (Formerly PMT 21)

**PMT 65**
**MOLDMAKING I**  3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
This class introduces student to the fundamentals of plastic injection mold designs and fabrication. This course includes basic shop operation, demonstrations, safety and the technology of moldmaking in the plastic industry. (Formerly PMT 22)

**PMT 66**
**HYDRAULICS AND PNEUMATICS**  3 UNITS
Class hours: 2.5 lecture/1.5 lab
Prerequisite: PMT 100 or equivalent with a grade of Credit or "C" or higher.
This course will introduce the student to the fundamentals of plastic injection mold designs and fabrication. This course includes basic shop operation, demonstrations, safety and the technology of moldmaking in the plastic industry. (Formerly PMT 22)

**PMT 67**
**FIBERGLASS II**  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
This is a course in fiberglass/composites manufacturing technology. Areas of concentration include the processes and techniques of fiberglass composites as applied in industry. This course will place the student in production situations similar to those encountered in industry. The student may also have an opportunity to construct a project of his/her own with instructor approval. (Formerly PMT 24)

**PMT 68**
**PLASTICS MATERIALS AND PROCESSES**  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
This course is directed toward the study of plastic materials used in processing areas. 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 materials processing that is covered includes injection molding, compression molding and extrusion. (Formerly PMT 25)

**PMT 70**
**COMPOSITES TECHNOLOGY**  2.5 UNITS
Class hours: 2 lecture/2 lab
Recommendation: PMT 67 or equivalent with a grade of Credit 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. (Formerly PMT 34)

**PMT 71**
**PLASTICS IV**  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: PMT 4 or equivalent with a grade of Credit or "C" or higher.
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. (Formerly PMT 41)
PO 101
AMERICAN POLITICAL INSTITUTIONS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher.

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. (Formerly POL 1)
Transfer Credit: CSU; UC

POL 102
INTERNATIONAL RELATIONS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher and satisfactory completion of the Reading Placement Process or READ 43 or equivalent with a grade of Credit or "C" or higher.

This course is a study of basic concepts, theories, and principles of international politics. Emphasis shall be placed on an examination of contemporary world affairs including the importance of nationalism, imperialism, ideology, alliance systems, the rise of the developing nations and the nature of international organizations. Specific case studies shall be examined to illustrate the various principles of international relations. (Formerly POL 11)
Transfer Credit: CSU; UC

POL 201
INTRODUCTION TO POLITICAL SCIENCE AND AMERICAN GOVERNMENT 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or "C" or higher.

This course is 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. This course is intended for college transfer students, especially political science majors. (Formerly POL 1)
Transfer Credit: CSU; UC

POL 210
COMPARATIVE GOVERNMENT 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory score on the English Placement Process or ENGL 52 with a grade of Credit or "C" or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or "C" or higher.

This course includes a study of comparative systems of government, differing ideologies,
and current political problems. Analyses of revolutionary forces in the 20th century are conducted for political insight and understanding. (Formerly POL 2)
Transfer Credit: CSU; UC

POL 230
CONTEMPORARY POLITICAL ISSUES: MIDDLE EAST 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
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. (Formerly POL 12)
Transfer Credit: CSU; UC

PSYCHOLOGY
(Humanities/ Social Sciences Division)

PSYC 101  (CAN PSY 2)
GENERAL INTRODUCTORY PSYCHOLOGY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
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. (Formerly PSYC 1)
Transfer Credit: CSU; UC

PSYC 103
CRITICAL THINKING IN PSYCHOLOGY 3 UNITS
Class hours: 3 lecture
Prerequisite: ENGL 100 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course 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 of probability are developed. There will be an emphasis on the application of critical thinking skills to everyday issues. (Formerly PSYC 3)
Transfer Credit: CSU; UC

PSYC 139
ISSUES IN PSYCHOLOGY 2 UNITS
Class hours: 2 lecture
Prerequisite: PSYC 101 or equivalent with a grade of Credit or "C" or higher.
This course is an in-depth survey of controversial issues in psychology highlighting interesting points of disagreement among psychologists on a theoretical as well as practical level. Topics include parapsychology, the inheritance of intelligence, biofeedback, pros and cons of psychological testing, meditation, psychosurgery, and deception in psychological experiments. (Formerly PSYC 20)
Transfer Credit: CSU; UC

PSYC 149
PSYCHOLOGY: THE STUDY OF HUMAN BEHAVIOR 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
This course is a general introductory psychology course which will acquaint the students with basic psychological terms, concepts, principles and methodological approaches associated with the scientific study of behavior. An eclectic blend of behavioristic, Freudian and Humanistic points of view will be presented in the televised lessons. (Formerly PSYC 10)
Transfer Credit: CSU; UC

PSYC 150
PERSONAL AND SOCIAL ADJUSTMENT 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: PSYC 101 and ENGL 52 or equivalent with grades of Credit or "C" or higher.
This course is a broad survey of the psychological theories of human personality, encompassing the behavioral, psychoanalytic and humanistic points of view. The focus is on 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. (Formerly PSYC 33)
Transfer Credit: CSU; UC

PSYC 210
ELEMENTARY STATISTICS 4 UNITS
Class hours: 3 lecture, 3 lab
Prerequisite: MATH 80 or MATH 80B or equivalent with a grade of Credit or "C" or higher.
This course emphasizes the calculation and interpretation of the basic statistical measures, with major emphasis upon the meaning, limitations, and applicability of statistical procedures. It is intended for majors and minors in the behavioral sciences especially in psychology and sociology. (Formerly PSYC 4)
Transfer Credit: CSU; UC

PSYC 220
RESEARCH METHODS 4 UNITS
Class hours: 3 lecture, 3 lab
Prerequisite: PSYC 101 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: Satisfactory score on English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher.
An introduction to the scientific study of psychological principles, this course is intended primarily for prospective psychology majors and other students who plan further work in psychology. Independent projects are developed, performed and reported with emphasis on laboratory and naturalistic techniques of observation and investigation. (Formerly PSYC 5)
Transfer Credit: CSU; UC

PSYC 241
INTRODUCTION TO PSYCHOBIOLOGY 3 UNITS
Class hours: 3 lecture
Recommendation: PSYC 101 or equivalent with a grade of Credit 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. (Formerly PSYC 2)
Transfer Credit: CSU; UC
Announcement of Courses

PSYC 251
DEVELOPMENTAL PSYCHOLOGY 3 UNITS
Class hours: 3 lecture
Prerequisite: None
An integrated study of the social, emotional, cognitive, and biological foundations of the human life cycle from conception to death will be presented in this course. Attention will also be devoted to the study of research methods and the application of research findings to ongoing developmental problems. Implications for personal and professional use will be discussed. (Formerly PSYC 11)
Transfer Credit: CSU, UC

PSYC 261
SOCIAL PSYCHOLOGY 3 UNITS
Class hours: 3 lecture
Prerequisite: None
This course emphasizes an introduction to methods and content of social psychology; theories of social behavior; communication; social influence; conformity; aggression; leadership; and, prejudice. Since emphasis will be given to practical applications of research findings, this elective course is recommended for students majoring in the social and behavioral sciences. (Formerly PSYC 13)
Transfer Credit: CSU, UC

PSYC 271
ABNORMAL PSYCHOLOGY 3 UNITS
Class hours: 3 lecture
Prerequisite: None
This course entails a detailed survey of the various types of abnormal behavior such as neurosis, psychosis, alcoholism and drug dependence, crime, sexual deviations, and mental retardation. The different views of abnormality, its causes, treatment, and prevention are also discussed. (Formerly PSYC 14)
Transfer Credit: CSU, UC

READING
(Liberal Arts Division)

READ 5T (Not degree applicable)
EDUCATIONAL TECHNOLOGY SKILLS FOR COLLEGE 0 UNIT
Class hours: 3 lab (17 weeks)
Open entry/open exit
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course increases student knowledge of educational technology resources on campus, improves student use of educational technology for successful completion of technology based course assignments, and improves student confidence in utilizing educational technology. Special attention will be given to skills necessary for success in distributed education courses. (Formerly READ 69.4/READ 58)

READ 6 (Not degree applicable)
TUTOR TRAINING 0.5 UNITS
Class hours: 3 lecture, open entry/open exit.
Prerequisite: Satisfactory completion of the Reading Placement Process or READ 43 or equivalent with a grade of Credit or “C” or higher.
This course is designed to acquaint the tutor with techniques in assisting students to gain better scholastic achievement. Those students who fail to complete nine hours of course work will not receive credit for this course. The course may be repeated for a maximum of one unit. This course is offered on a credit/no credit basis only. (Formerly READ 60)

READ 41T (Not degree applicable)
INDIVIDUALIZED READING 0 UNIT
Class hours: 3 lab, open entry/open exit
Prerequisite: None.
This course is for students who wish to improve their reading skills outside of a structured class. Students will be tested as they enter the class, or by the reading component of the Cerritos College assessment test. Based on the scores from the test, work in any of the following areas may be assigned: phonics, vocabulary study, vocabulary in context, literal comprehension, inferential comprehension, critical reading or study-related reading. (Formerly READ 51)

READ 42 (Not degree applicable)
READING ACCESS FOR COLLEGE SUCCESS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Completion of the Reading Placement Process.
This course is designed to help culturally diverse students make the transition from non-credit courses into college-credit programs. It is open to non-readers and limited readers, both native and immigrants. Visual, auditory, tactile, and kinesthetic instruction are included. Phonics, vocabulary, reading, and writing skills are stressed. (Formerly READ 69.1/READ 52)

READ 43 (Not degree applicable)
BASIC READING SKILLS 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the Reading Placement Process or READ 42 or equivalent with a grade of Credit or “C” or higher.
Recommendation: None.
This course is designed for students who wish to improve basic reading skills. Coursework includes work on fundamental word analysis skills and fundamental comprehension skills. This course will be offered on a credit/no credit basis only. To receive credit for this course, students will need to demonstrate that they are reading at the tenth grade level. (Formerly READ 53)

READ 44 (Not degree applicable)
EFFECTIVE STUDY METHODS FOR COLLEGE 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
The student will become aware of and experience proven learning techniques ensuring improved comprehension and retention of information from college lectures and textbooks. Skills to be emphasized include: study time management, methods for reading textbooks efficiently, note-taking techniques, understanding textbook assignments, preparation for examinations, test-taking techniques, effective listening techniques, guidelines for vocabulary development, memory techniques, the preparation of research papers and library skills. Study skills surveys will be used to help students identify and improve upon their personal study skills habits and their individual mode of learning. (Formerly READ 59)

READ 46 (Not degree applicable)
VOCATIONAL/TECHNICAL READING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
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. (Formerly READ 56)

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

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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. (Formerly READ 6.2)

Transfer Credit: CSU

READ 200
ANALYSIS AND CRITICAL READING 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of "C" or higher.
Corequisite: None.
Recommendation: Completion of ENGL 52 or equivalent with a grade of Credit or "C" or higher.

This course focuses on student understanding of the cognitive processes of critical thinking to critical reading in an integrated, interdisciplinary framework. Emphasis is placed on the development of critical thinking, reading, and writing skills with applications in interpretation, analysis, and criticism of academic readings. (Formerly READ 1)

Transfer Credit: CSU

REAL ESTATE
SEE BUSR (Business Real Estate)

SECRETARIAL (ADMINISTRATIVE, LEGAL, MEDICAL)
SEE BCOT (Business Computerized Office Technologies)

SIGN LANGUAGE (Liberal Arts Division)

SL 48 (Not degree applicable)
INTERMEDIATE II SIGN LANGUAGE 2 UNITS
Class hours: 2 lecture, 1 lab
Prerequisite: SL 102 or equivalent with a grade of Credit of "C" or higher.

This course is designed for the student at the intermediate sign language level. This course also provides students with a more extensive sign vocabulary, increased skills in sign language and more fluency in signing. Issues on deaf culture will be discussed. This course may be taken for a maximum of 4 units. (Formerly SL 52)

SL 101 BEGINNING AMERICAN SIGN LANGUAGE 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.

This beginning course emphasizes expressive signs, receptive signs and fingerspelling. An appreciation of cultural diversity is developed through the study of the differences and similarities between deaf and hearing cultures. (Formerly SL 50)

Transfer Credit: CSU; UC

SL 102 INTERMEDIATE AMERICAN SIGN LANGUAGE 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: SL 101 or equivalent with a grade of Credit of "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. (Formerly SL 51)

SOCIOLGY (Humanities/ Social Sciences Division)

SOC 101 INTRODUCTORY SOCIOLOGY PRINCIPLES 3 UNITS
Class hours: 3 lecture
Prerequisite: None.

Sociology 1 represents an introductory survey of the fundamental theories, philosophies and problems associated with the study of sociology in a pluralistic society. A multicultural approach is used throughout in the analysis of human relationships through a study of major concepts. Institutions and their functions, personality development, social interaction, social change, collective behavior, the environment, war and peace are major themes for this course. (Formerly SOC 1)

Transfer Credit: CSU; UC
SOC 110  MARRIAGE AND THE FAMILY  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
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. (Formerly SOC 15)
Transfer Credit: CSU, UC

SOC 120  INTRODUCTION TO HUMAN SEXUALITY  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Sociology 120 represents an introductory survey of the behavioral, biological, historical, religious, and socio-cultural aspects of human sexuality in a pluralistic society. A multicultural approach is used throughout in the study of the anatomy and physiology of sexual function, treatment of dysfunction, psychosexual development and the relationship between sexuality, changing social/cultural standards and contemporary values. Sex across the life span, pregnancy, birth control, sexually transmitted diseases, the AIDS crisis, homosexuality, sexual assault, incest, and child molestation are among the topics covered. (Formerly SOC 10)
Transfer Credit: CSU, UC

SOC 201  SOCIAL PROBLEMS  3 UNITS
(CAN SOC 4)
Class hours: 3 lecture
Prerequisite: None.
Recommendation: SOC 101 or equivalent with a grade of Credit or “C” or higher.
Sociology 201 represents a study of undesirable socially constructed social problems. Special emphasis is on the range of phenomena considered social problems which may include: war, overpopulation, poverty, street crime, white-collar crime, racial/ethnic conflict, mental illness, the environment, health care, international terrorism, government regulation, drug abuse, ageism, unemployment, hopelessness, the decline of the family, child abuse, urban decay, pornography, overcrowded prisons, campus unrest, sex discrimination, abortion, alienated youth, and AIDS. (Formerly SOC 2)
Transfer Credit: CSU, UC

SOC 210  AMERICAN MINORITY RELATIONS  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: SOC 101 or equivalent with a grade of Credit or “C” or higher.
Sociology 210 is a study of adolescents and delinquents in particular. (Formerly SOC 22)
Transfer Credit: CSU, UC

SOC 215  SOCIOLOGY OF CULTURAL DIVERSITY: CHALLENGE AND CHANGE  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Sociology 215 represents an introduction to the nature of culture, world views, customs and mores, views on religion, marriage and the family, children and the elderly, ethnocentrism, stereotyping, the nature of prejudice and discrimination, and social change. (Formerly SOC 25)
Transfer Credit: CSU, UC

SOC 220  INTRODUCTION TO HUMAN SERVICES  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: SOC 101 or equivalent with a grade of Credit or “C” or higher is strongly recommended.
Sociology 220 represents an introduction to 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. (Formerly SOC 16)
Transfer Credit: CSU, UC

SOC 225  CONTEMPORARY SOCIAL ISSUES  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Sociology 225 represents a study of adolescents and delinquents in general and delinquents in particular. (Formerly SOC 22)
Transfer Credit: CSU

SOC 230  JUVENILE DELINQUENCY  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Sociology 230 represents an introduction to the nature of culture, world views, customs and mores, views on religion, marriage and the family, children and the elderly, ethnocentrism, stereotyping, the nature of prejudice and discrimination, and social change. (Formerly SOC 22)
Transfer Credit: CSU

SOC 250  SOCIOLOGY OF AGING  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Sociology 250 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. (Formerly SOC 16)
Transfer Credit: CSU, UC
SPANISH (Liberal Arts Division)

SPAN 101 ELEMENTARY SPANISH 5 UNITS
Class hours: 5 lecture, 1 hr. lab arr. or higher.
Prerequisite: None.
This beginning Spanish course emphasizes listening, speaking, reading, and writing and helps to develop an appreciation of cultural diversity through the study of differences and similarities between cultures. (Formerly SPAN 1)
Transfer Credit: CSU

SPAN 102 ELEMENTARY SPANISH 5 UNITS
Class hours: 5 lecture + 1 hr. lab arr. or higher.
Prerequisite: SPAN 101 or SPAN 103B or equivalent with a grade of Credit 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. (Formerly SPAN 2)
Transfer Credit: CSU; UC

SPAN 103A ELEMENTARY SPANISH FOR TEACHER PREPARATION 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This beginning course in Spanish language for teacher preparation emphasizes listening, speaking, reading, and writing, and helps to develop an appreciation of cultural diversity through the study of differences and similarities between cultures. (Formerly SPAN 16)
Transfer Credit: CSU

SPAN 103B ELEMENTARY SPANISH FOR TEACHER PREPARATION 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: SPAN 103A or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course is a continuation of the study of basic Spanish language principles for teacher preparation with an emphasis on oral and written communication. It further develops an appreciation of cultural diversity through the study of differences and similarities between cultures. (Formerly SPAN 17)
Transfer Credit: CSU

SPAN 111 ELEMENTARY SPANISH FOR SPANISH SPEAKERS 5 UNITS
Class hours: 5 lecture, 1 lab
Prerequisite: None.
This beginning course corresponding to SPAN 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. (Formerly SPAN 1.1)
Transfer Credit: CSU; UC

SPAN 112 ELEMENTARY SPANISH FOR SPANISH SPEAKERS 5 UNITS
Class hours: 5 lecture, 1 lab
Prerequisite: SPAN 101 or SPAN 111 or SPAN 103B or equivalent with a grade of Credit or "C" or higher.
This course is a continuation of SPAN 111 or SPAN 101 designed for the native speaker. It corresponds to SPAN 102 with an emphasis on oral and written communication. This course is designed for students that already speak, understand and have studied Spanish. It helps develop the appreciation of cultural diversity through the study of differences and similarities between the diverse Latin-American and Spanish cultures. (Formerly SPAN 6)
Transfer Credit: CSU

SPAN 201 (CAN SPAN SEQ B)(CAN SPAN 8) INTERMEDIATE SPANISH 5 UNITS
Class hours: 5 lecture/1 hour lab arranged
Prerequisite: SPAN 102 or SPAN 112 or equivalent with a grade of Credit or "C" or higher.
This course provides a review and in-depth study of important grammatical concepts. Reading and interpretation of literary works by Hispanic writers and guided and original compositions are included. This course will further develop the appreciation of cultural diversity. The class is conducted primarily in Spanish. (Formerly SPAN 3)
Transfer Credit: CSU; UC

SPAN 202 (CAN SPAN SEQ B)(CAN SPAN 10) INTERMEDIATE SPANISH 4 UNITS
Class hours: 4 lecture
Prerequisite: SPAN 201 or equivalent with a grade of Credit or "C" or higher.
This course provides a review and in-depth study of grammatical concepts. Reading and interpretation of literary works by Latin American and Spanish writers, and guided and original compositions are included. This course provides further practice in the discussion and presentation of current cultural topics through literature. This class, conducted primarily in Spanish, will further develop the appreciation of cultural diversity and is recommended for all Spanish majors. (Formerly SPAN 4)
Transfer Credit: CSU; UC

SPAN 205 ADVANCED SPANISH COMPOSITION 3 UNITS
Class hours: 3 lecture
Prerequisite: SPAN 201 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course is a continuation of the development of Spanish composition skills and applied grammar. Compositions are assigned to develop specific writing skills and improve critical judgment. This course will further develop the appreciation of cultural diversity. The class is conducted primarily in Spanish. (Formerly SPAN 3.5)
Transfer Credit: CSU; UC

SPAN 206 HISPANIC LITERATURE IN THE MEDIA 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: SPAN 201 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course will examine the translation of various literary genres from different periods of Hispanic literature, both Peninsular and Latin American, into various audio/visual media. An exploration of how literature and audio/visual media create, shape, reinforce, and/or change culture and impact its images, stereotypes, and archetypes will be examined. Theoretical approaches to the adaptation of literature into other media will be studied. (Formerly SPAN 6)
Transfer Credit: CSU; UC

SPAN 210 HIGHLIGHTS OF HISPANIC CULTURE 3 UNITS
Class hours: 3 lecture
Prerequisite: SPAN 102 or SPAN 112 or equivalent with a grade of Credit or "C" or higher.
This course traces the principal currents of Hispanic culture through Europe and the

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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. (Formerly SPAN 10) Transfer Credit:CSU;UC

SPAN 213
LIVING SPANISH GRAMMAR AND WRITTEN COMMUNICATION 2 UNITS
(An intermediate course)
Class hours:2 lecture
Prerequisite: SPAN 102 or SPAN 112 or equivalent with a grade of Credit or “C” or higher.
Study of fundamental grammatical principles and sentence structures with drills and translations. (Special emphasis on uses of the 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. (Formerly SPAN 13)
Transfer Credit:CSU;UC

SPAN 214
LIVING SPANISH GRAMMAR AND WRITTEN COMMUNICATION 2 UNITS
(An intermediate course)
Class hours:2 lecture
Prerequisite: SPAN 102 or SPAN 112 or equivalent with a grade of Credit or “C” or higher.
Study of fundamental grammatical principles and sentence structures with drills and translations. (Special emphasis on uses of the Subjunctive and the phonetic rules of the accent.) Writing of short compositions blending creativity with grammatical correctness. An excellent review course for all students. Recommended for Spanish majors. (Formerly SPAN 14)
Transfer Credit:UC

SPAN 223
SPANISH FOR HEALTH AND MEDICAL CAREERS 3 UNITS
Class hours:3 lecture
Prerequisite: None.
This Spanish course for health and medical personnel is designed for students who plan to use Spanish as a communication tool in their field of specialization. A major emphasis is on vocabulary and situational dialogues closely related to health and medical careers. (Formerly SPAN 23)
Transfer Credit:CSU

SPAN 245
INTRODUCTION TO CHICANO/ MEXICAN AMERICAN CULTURE 3 UNITS
Class hours:3 lecture
Prerequisite: None.
A study of the culture of the Chicano/Mexican American student. Analyzes the family, religious institutions, contributions, advancements and problems of the Chicano in the United States and aids him to achieve self-identification and an understanding of his relationship to his own community. Develops insight into the special nature of Chicano culture for those outside that culture. Conducted in English and open to all students. (Formerly SPAN 45)
Transfer Credit:CSU;UC

SPAN 281
BEGINNING CONVERSATIONAL SPANISH 3 UNITS
Class hours:3 lecture
Prerequisite: SPAN 102 or equivalent with a grade of Credit or “C” or higher.
This course 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. (Formerly SPAN 8.1)
Transfer Credit:CSU;UC

SPAN 282
INTERMEDIATE CONVERSATIONAL SPANISH 3 UNITS
Class hours:3 lecture
Prerequisite: SPAN 281 or equivalent with a grade of Credit or “C” or higher.
This course provides intensive practice in the discussion of current topics including multiculturalism. Emphasis is on the acquisition of special idioms and vocabulary suitable to conversation about the family, the world of work, business, sports and pastimes, popular culture, travel and ecology. This course, conducted primarily in Spanish, is recommended for all Spanish majors. (Formerly SPAN 8.2)
Transfer Credit:CSU;UC

SPAN 283
ADVANCED CONVERSATIONAL SPANISH 3 UNITS
Class hours:3 lecture
Prerequisite: SPAN 282 or equivalent with a grade of Credit or “C” or higher.
This course consists of in depth oral discussion of cultural topics, including modern family life, the job market, advertising in the business world, pastimes and amusements, economy versus ecology, the world of travel and multiculturalism. Emphasis is on the acquisition of appropriate vocabulary and language patterns, and the creative development of arguments. This course, conducted in Spanish, is recommended for all Spanish majors. (Formerly SPAN 8.3)
Transfer Credit:CSU;UC

SPECIAL STUDIES

SS 29 (Not degree applicable)
SPECIAL STUDIES 0-5 UNITS
Class hours:Variable
Prerequisite: Varies according to topic.
Corequisite: Varies according to topic.
Recommendation: Varies according to topic.
This course will provide students the opportunity to explore topics not offered in the regular departmental curriculum. Topics are selected according to student and instructor interests and needs. This course is not offered every semester. For specific departmental offerings of Special Studies, please see the current Schedule of Classes.

SS 69
SPECIAL STUDIES 0-5 UNITS
Class hours:Variable
Prerequisite: Varies according to topic.
Corequisite: Varies according to topic.
Recommendation: Varies according to topic.
This course will provide students the opportunity to explore topics not offered in the regular departmental curriculum. Material will vary by discipline and from semester to semester. Topics are selected according to student and instructor interest. These courses are not offered each semester.

SS 109
SPECIAL STUDIES 0-5 UNITS
Class hours:Variable
Prerequisite: Varies according to topic.
Corequisite: Varies according to topic.
Recommendation: Varies according to topic.
This course will provide students the opportunity to explore topics in a particular discipline not offered in a regular departmental curriculum. Material will vary by discipline and from semester to semester. Topics are selected according to student and instructor interest. These courses are not offered each semester.

Transfer Credit:CSU

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SPEECH

(Liberal Arts Division)

SPCH 30 (Not degree applicable)
COMMUNICATION DISORDERS 1 UNIT
Class hours: 3 lecture/lab
Prerequisite: None.
This course is designed for students with a communication difficulty. Speech-Language-Hearing problems such as articulation, stuttering, voice disorders, regional or foreign dialects, language impairments due to a hearing loss are dealt with by individual or small group therapy. This course may be taken for a maximum of 4 units. The course is to be offered on a credit/no credit basis. (Formerly SPCH 50.1)

SPCH 31 (Not degree applicable)
COMMUNICATION DISORDERS 1 UNIT
Class hours: 3 lecture/lab
Prerequisite: 4 units of SPCH 30 or equivalent with a grade of Credit or "C" or higher.
This course is a continuation of individual and/or small group therapy for students with a communication difficulty, such as articulation, stuttering, voice disorders, regional or foreign dialects, language usage, and speech and language impairments due to hearing loss. It is a continuation of SPCH 30 for students who require further instruction. This course may be taken for a maximum of 4 units. This course is offered on a Credit/No Credit basis. (Formerly SPCH 50.2)

SPCH 32 (Not degree applicable)
COMMUNICATION DISORDERS 0 UNIT
Class hours: 3 lecture
Open entry/open exit
Prerequisite: None.
Limitation on enrollment: Consultation by a certified speech pathologist. This course is for those students who have speech, hearing, language difficulties such as articulation problems, stuttering, voice disorders, regional or foreign dialects, and speech impairments due to hearing difficulties. This course provides individual or small group therapy. Students may enter the clinic at any time during the semester. (Formerly SPCH 50.3)

SPCH 45 (Not degree applicable)
SPEECH-COMMUNICATION FOR CAREERS 1 UNIT
Class hours: 1 lecture, 1 lab
Prerequisite: None.
This course is a practicum in speech-communication within a career or occupational role. Theory will serve as a basis for the practical application of communication principles. Effective interaction with superiors, co-workers and the public is stressed. (Formerly SPCH 65)

SPCH 46T (Not degree applicable)
INDIVIDUALIZED SPEECH 0 UNIT
Class hours: 3 lab (17 weeks)
Open entry/open exit
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course explores topics in speech communications that are necessary for successful communication interactions to occur in college or community settings and, in the workplace. This course may not be taught every semester. (Formerly SPCH 66)

SPCH 60 INTRODUCTION TO COMMUNICATION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: None.
The interpersonal communication course is an overview of theory and research on human communication. The course is designed with the opportunity to improve students communication skills in a variety of communication contexts. This course includes skill practices, oral presentations, and videotaping as instructional tools. (Formerly SPCH 12)
Transfer Credit: CSU; UC

SPCH 100 FUNDAMENTALS OF ORAL COMMUNICATION 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent or SPCH 60 or equivalent with a grade of Credit or "C" or higher.
This survey course is an overview of the diversity of human communication. The student develops an understanding of the communication process, the basic elements of improving interpersonal communication, and how to reduce communication apprehension. Also included are leadership and participation in small groups, interviewing, and speech preparation. This course includes oral presentations, and videotaping is used as an instructional tool. (Formerly SPCH 1)
Transfer Credit: CSU; UC

SPCH 110 INTERCULTURAL COMMUNICATION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: READ 54 or ENGL 52 or equivalent with a grade of Credit or "C" or higher.
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. (Formerly SPCH 7) Transfer Credit: CSU; UC

**SPCH 140**
**ORAL INTERPRETATION OF LITERATURE**  
Class hours: 3 lecture  
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent or SPCH 60 or equivalent with a grade of Credit or “C” or higher.  
This course focuses on the analysis and interpretation of both prose and verse literature, including study of voice production, structure and content of literature, and techniques of effective oral communication of meaning from the printed page. (Formerly SPCH 4.1) Transfer Credit: CSU; UC

**SPCH 145**
**STORYTELLING**  
Class hours: 3 lecture  
Prerequisite: None.  
This course is an introduction to the history of storytelling and the techniques of listening, preparation, and the presentation of stories to various age groups and in various settings. Students acquaint themselves with various literary genres—folk tales, sagas, epics, legends, myths, poetry, and drama. Videotape is used as an evaluative tool. (Formerly SPCH 10) Transfer Credit: CSU

**SPCH 150**
**ORGANIZATIONAL COMMUNICATION**  
Class hours: 3 lecture  
Prerequisite: None. Corequisite: None. Recommendation: READ 54 or ENGL 52 or equivalent with a grade of Credit or “C” or higher or satisfactory completion of the English Placement Process.  
This course presents theories and principles of communication with an emphasis on application of concepts relevant to organizational communication. This course focuses on variables that influence the communication process within the context of business and organizations. The combined application of speaking, listening, writing, and reading skills in business and professional settings will be emphasized. Assignments and activities involve students in the analysis of different communication patterns within organizations and the exploration and practice of methods, skills and techniques for improving communication within the professional setting. Transfer Credit: CSU

**SPCH 160**
**PARLIAMENTARY PROCEDURE**  
Class hours: 2 lecture (9 weeks)  
Prerequisite: None.  
This course entails an examination of principles, practices and procedures in formal deliberation. Emphasis is placed on parliamentary law. (Formerly SPCH 6.1) Transfer Credit: CSU

**SPCH 165**
**GROUP PROCEDURE**  
Class hours: 2 lecture (9 weeks)  
Prerequisite: SPCH 160 or equivalent with a grade of Credit or “C” or higher.  
This course addresses leadership functions, techniques of cooperative problem solving, types of organizations, creating new organizations, and informal deliberation. (Formerly SPCH 6.2) Transfer Credit: CSU

**SPCH 229**
**SPEECH AND LANGUAGE DEVELOPMENT IN CHILDREN**  
Class hours: 3 lecture  
Prerequisite: None.  
This course is designed to provide the student an understanding of how speech and language develops in normal monolingual and bilingual children and what factors characterize language delay or a language disorder in children with special needs, including exposure to standardized tests and measures of language development. Practice will be provided in eliciting and analyzing speech/language samples from children representing native and non-native speakers and demonstrating normal and delayed speech/language skills. It is recommended for students majoring in speech pathology, the Speech-Language Pathology Assistant Program, elementary education, preschool or special education. (Formerly SPCH 9) Transfer Credit: CSU

**SPCH 235**
**FUNDAMENTALS OF ARGUMENTATION AND PERSUASION**  
Class hours: 3 lecture and evaluation  
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.  
This course focuses on the fundamentals of argumentation and persuasion as used in communication in contemporary society. The student will apply various types of argument and reasoning in an attempt to solve current problems as well as studying how and why people are persuaded. Videotape is used as an evaluative tool. (Formerly SPCH 6) Transfer Credit: CSU

**SPCH 236**
**BEGINNING FORENSICS WORKSHOP**  
Class hours: 1 lecture/2 lab  
Open entry/open exit  
Prerequisite: None. Corequisite: None. Recommendation: None.  
This course provides students with opportunities to acquire basic oral communication, organizational, and research skills while gaining self-confidence and reducing speaking anxiety. Workshop includes competition at intercollegiate speech and debate tournaments. This course is recommended for all Speech majors. This course may be repeated for a maximum of 4 units. (Formerly SPCH 5.1) Transfer Credit: CSU

**SPCH 237**
**INTERMEDIATE FORENSICS WORKSHOP**  
Class hours: 1 lecture/2 lab  
Open entry/open exit  
Prerequisite: None. Corequisite: SPCH 236. Recommendation: None.  
This course provides students with numerous opportunities to improve oral communication, organizational, and research skills while developing self-confidence and reducing speaking anxiety. Workshop includes competition at intercollegiate speech and debate tournaments, and may also include on-campus and/or community speaking opportunities. Emphasis is on student competition and events development. This course is recommended for all Speech majors. This course may be repeated for a maximum of 4 units. (Formerly SPCH 5.2) Transfer Credit: CSU

**SPCH 238**
**ADVANCED FORENSICS WORKSHOP**  
Class hours: 1 lecture/2 lab  
Open entry/open exit  
Prerequisite: None. Corequisite: SPCH 236 and SPCH 237 Recommendation: None.
This course provides students with numerous opportunities to compete in multiple events at intercollegiate speech and debate tournaments, and also includes on-campus and/or community speaking opportunities. Intensive improvement of oral communication, organizational, and research skills is emphasized, along with commitment to participate in multiple facets of the program. This course, recommended for all Speech majors, develops scholarship, leadership, a strong team ethic, and an appreciation for the academic competitive experience. This course may be repeated for a maximum of 4 units. (Formerly SPCH 5.3) Transfer Credit:CSU

**SPCH 239**  
**FORENSICS WORKSHOP**  2 UNITS  
Class hours:1 lecture, 3 lab  
Prerequisite: None.  
Any person anxious to develop verbal confidence is encouraged to enroll in the Forensic Workshop. Workshop includes speaking opportunities before audiences at Intercollegiate speech tournaments and community organizations such as Kiwanis, Lions, Rotary, etc. This course may be taken for a maximum of 8 units. (Formerly SPCH 5) Transfer Credit:CSU

**SPCH 240**  
**ORAL INTERPRETATION: READERS’ THEATRE**  3 UNITS  
Class hours:3 lecture  
Prerequisite: None.  
This course offers further study of oral interpretation principles emphasizing dramatic literature through preparation and performance of a Readers’ Theater production. Videotape is used as an evaluative tool. (Formerly SPCH 4.2) Transfer Credit:CSU;UC

**SPCH 271**  
**VOICE AND ARTICULATION**  3 UNITS  
Class hours:3 lecture  
Prerequisite: None.  
This course is designed to help the student learn how voice and speech are produced by a study of anatomy and physiology of the speech and hearing mechanism and to learn how to use these mechanisms effectively and efficiently for oral communication. Students will learn phonetic transcription skills using the International Phonetic Alphabet (IPA) to assist their work on their own communication skills emphasizing precise articulation. Distinctive features of loudness, rate, pitch variation, vocal variety and controlled respiratory patterns will also be studied. (Formerly SPCH 3) Transfer Credit:CSU

**SPEECH-LANGUAGE PATHOLOGY**  
*(Health Occupations)*

**SLP 100**  
**INTRODUCTION TO SPEECH AND LANGUAGE PATHOLOGY**  3 UNITS  
Class hours:3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: ENGL 52 or equivalent with a grade of Credit or “C” or higher.  
This course introduces foundational skills and principal theories for clinical management of individuals with communicative disorders. Linguistic and cultural variations will be explored. Legal and ethical scope of practice pertinent to roles in the speech-language pathology fields will be delineated. Transfer Credit:CSU

**SLP 110**  
**NORMAL COMMUNICATION, DISORDERS, AND DIFFERENCES**  4 UNITS  
Class hours:4 lecture/1 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: A&P 120 or equivalent with a grade of Credit or “C” or higher.  
This course focuses on normal verbal and non-verbal communication across the lifespan, including an understanding of how the different areas of language contribute to the total communication process. Students will learn what distinctive features constitute normal speech, language and hearing in a multicultural society. Observation techniques, assessment and intervention tools will be introduced. Transfer Credit:CSU

**SLP 120L**  
**PHONETICS LAB**  1 UNIT  
Class hours:3 lab  
Prerequisite: SLP 100 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: Concurrent enrollment in or completion of SPCH 271.  
Recommendation: None.  
This is a skills lab designed to provide the student with practice in phonetic transcription skills. Students will transcribe normal and disordered speech using the International Phonetic Alphabet (IPA) for broad transcription. Linguistic variations and regional dialects will be addressed. This course may be taken for a maximum of three units. Transfer Credit:CSU

**SLP 125**  
**CHILDHOOD DISORDERS AND TREATMENT**  5 UNITS  
Class hours:4 lecture/3 lab  
Prerequisite: Completion of SLP 100 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: A&P 120 or equivalent with grade of Credit of “C” or higher.  
This course focuses on screening procedures and treatment interventions used for speech, language and hearing disorders in children in educational and healthcare settings. The student will learn to use observational checklists, administer screening assessment tests and complete related therapeutic protocol forms. Transfer Credit:CSU

**SLP 230**  
**ADAPTIVE COMMUNICATION TECHNOLOGY**  1.5 UNITS  
Class hours:1.5 lecture/0.5 lab  
Prerequisite: Completion of SLP 100 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
This course introduces the student to the needs of non-oral children and adults, as well as the preparation, use and maintenance of selected adaptive communication equipment. Emphasis is placed on the collaborative use of assistive equipment for speech, language and hearing disorders. Transfer Credit:CSU

**SLP 235**  
**ADULT DISORDERS AND TREATMENT**  5 UNITS  
Class hours:4 lecture/3 lab  
Prerequisite: SLP 125 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
This course is a continuation of SLP 125 and includes 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
### TECHNICAL MATHEMATICS

(For Additional Courses See Mathematics)

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All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
TH 114 VOICE FOR ACTING 2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: None.
This course presents vocal techniques to free and develop the actor’s voice. It includes exercises in relaxation, physical awareness, and proper breathing, as well as in the development of diction, range and projection as required for theatrical performance. (Formerly TH 14)
Transfer Credit: CSU; UC

TH 115 STAGE MOVEMENT AND COMBAT 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
This is an introduction to basic stage movement and combat for the actor. Emphasis will be placed on physical and spatial awareness, using movement creatively in characterization, and developing confidence in the physical self. Various stage combat techniques will be covered so that students can fully choreograph their own stage fights. This course may be taken for a maximum of 6 units. (Formerly TH 15)
Transfer Credit: CSU; UC

TH 116 STAND-UP COMEDY 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
This is a complete course in stand-up comedy from material development to performance. The student will create a comic persona, write several routines, and performs these routines at venues both on- and off-campus. Field trip to local comedy clubs will be arranged. This course may be taken for a maximum of 6 units. (Formerly TH 16)

TH 117 STAGE MAKE-UP 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: None.
This course provides instruction in techniques of theatrical make-up. Crew assignments in college productions are required. This course may be taken for a maximum of 6 units. (Formerly TH 17)

TH 118 THEATRE STAGECRAFT 3 UNITS
Class hours: 1 lecture/7 lab
Prerequisite: TH 123 or audition or equivalent with a grade of Credit or “C” or higher.
This is an introduction to basic stage movement and combat for the actor. Emphasis will be placed on physical and spatial awareness, using movement creatively in characterization, and developing confidence in the physical self. Various stage combat techniques will be covered so that students can fully choreograph their own stage fights. This course may be taken for a maximum of 6 units. (Formerly TH 18)

TH 119 INTERMEDIATE ACTING TO CHARACTERIZATION 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: TH 110 or equivalent with a grade of Credit or “C” or higher.
This is an advanced course in acting methods and practices, with particular focus upon creating exciting, believable characters. Students will learn to find elements from their own lives to use in characterization, and then to explore cultures and walks of life other than their own. (Formerly TH 19)
Transfer Credit: CSU; UC

TH 120 REHEARSAL AND PERFORMANCE FOR THE LEADING ROLES 3 UNITS
Class hours: 1 lecture/7 lab
Prerequisite: By audition.
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. (Formerly TH 120)

TH 121 STAGE CREW ACTIVITY 1 UNIT
Class hours: 0.5 lecture/2.5 lab
Prerequisite: None.
Recommendation: None.
Students in this course will rehearse and perform a major theatrical production. Students should contact the Theatre Department for a schedule of audition dates. This particular course is for those cast in “supporting” roles. The course may be taken for a maximum of 8 units. (Formerly TH 121)
Transfer Credit: CSU; UC

TH 122 REHEARSAL AND PERFORMANCE FOR THE SUPPORTING ROLE 2 UNITS
Class hours: 1 lecture/4 lab
Prerequisite: By audition.
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. (Formerly TH 122)

TH 123 STAGE CREW ACTIVITY 1 UNIT
Class hours: 0.5 lecture/2.5 lab
Prerequisite: None.
Recommendation: None.
Students in this course will rehearse and perform a major theatrical production. Students should contact the Theatre Department for a schedule of audition dates. This particular course is for those cast in “supporting” roles. The course may be taken for a maximum of 8 units. (Formerly TH 123)
Transfer Credit: CSU; UC

TH 124 STAGE CREW ACTIVITY 1 UNIT
Class hours: 0.5 lecture/2.5 lab
Prerequisite: None.
Recommendation: None.
Students in this course will rehearse and perform a major theatrical production. Students should contact the Theatre Department for a schedule of audition dates. This particular course is for those cast in “supporting” roles. The course may be taken for a maximum of 8 units. (Formerly TH 124)
Transfer Credit: CSU; UC

TH 125 REHEARSAL AND PERFORMANCE FOR THE MINOR ROLE 1 UNIT
Class hours: 0.5 lecture/2.5 lab
Prerequisite: By audition.
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. (Formerly TH 125)

TH 126 REHEARSAL AND PERFORMANCE FOR THE MINOR ROLE 1 UNIT
Class hours: 0.5 lecture/2.5 lab
Prerequisite: By audition.
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. (Formerly TH 126)

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This course introduces the student to backstage crew skills and duties in connection with the mounting of college plays. The student will be assigned to running or preparation crews as scenery, lighting, costumes, sound, props, makeup, or house management. This course may be taken for a maximum of 4 units. (Formerly TH 31.2/TH 131B)
Transfer Credit:CSU;UC

TH 134 
TECHNICAL PRODUCTION 2 UNITS
Class hours:1 lecture/5 lab
Prerequisite: None.
This course introduces the student to technical theatre work in connection with the mounting of college plays. Emphasis is on the design and preparation of scenery, lighting, costume, sound, props, and makeup. Students may also be assigned to a running crew for some of their lab hours. This course may be taken for a maximum of 8 units. (Formerly TH 31.2/TH 131B)
Transfer Credit:CSU;UC

TH 136 
TOURING THEATRE PRODUCTION FOR SUPPORTING ROLES 2 UNITS
Class hours:1.5 lecture/1.5 lab
Prerequisite: By audition.
In this course students in supporting roles prepare one-acts plays, "story theatre" programs, or improvisational performances, which are taken on tour and performed for the community. This course may be taken for a maximum of 8 units. (Formerly TH 36)
Transfer Credit:CSU

TH 137 
TOURING THEATRE PRODUCTION FOR LEADING ROLES 2 UNITS
Class hours:1.5 lecture/2.5 lab
Prerequisite: By audition
Corequisite: None.
Recommendation: None.
In this course students in leading roles prepare one-acts plays, "story theatre" programs, or improvisational performances, which are taken on tour and performed for community organizations and schools. This course may be taken for a maximum of 8 units.
Transfer Credit:CSU

TH 140 
THEATRE DANCE—BEGINNING JAZZ 2 UNITS
Class hours:4 studio hours
Prerequisite: None.
This course is an introduction to jazz dance styles and techniques. Emphasis is on mastering the fundamental skills basic to jazz dance technique and artistic performance. This course may be taken for a maximum of 4 units. (Formerly TH 40)
Transfer Credit:CSU;UC

TH 141 
THEATRE DANCE—INTERMEDIATE JAZZ 2 UNITS
Class hours:4 studio hours
Prerequisite: TH 140 or equivalent with a grade of Credit or "C" or higher.
This course is a continuation of the development of jazz dance techniques and style begun in TH 140. Emphasis is on mastery of more complicated jazz dance combination patterns and their performance. This course may be taken for a maximum of 4 units. (Formerly TH 41)
Transfer Credit:CSU;UC

TH 142 
THEATRE DANCE—BEGINNING TAP 2 UNITS
Class hours:4 activity
Prerequisite: None.
This course is an introduction to basic tap dance techniques and styles. Emphasis is on mastery of basic tap dance steps, rhythms, combination patterns and their performance. This course may be taken for a maximum of 4 units. (Formerly TH 42)
Transfer Credit:CSU;UC

TH 143 
THEATRE DANCE—INTERMEDIATE TAP 2 UNITS
Class hours:4 activity
Prerequisite: TH 142 or equivalent with a grade of Credit or "C" or higher.
This course is a continuation of the development of tap dance techniques and style begun in TH 142. Emphasis is on mastery of more complicated tap dance steps, rhythms, combination patterns and their performance. This course may be taken for a maximum of 4 units. (Formerly TH 43)
Transfer Credit:CSU;UC

TH 145 
COSTUME PRODUCTION FOR DANCE 1 UNIT
Class hours: 1 lecture/3 lab (9 weeks)
Prerequisite: None.
This course introduces the student to the fabrication of costume elements including patterning, machine sewing, hand sewing, dyeing, and decoration for dance. This course may be taken for of a maximum of 4 units. (Formerly TH 45)
Transfer Credit:CSU;UC

TH 146 
MUSICAL THEATRE PRODUCTION FOR CHORUS 2 UNITS
Class hours:1 lecture/3 lab
Prerequisite: By audition.
Corequisite: None.
Recommendation: None.
This course involves participation in a major Theatre Department musical production as a member of the chorus. Activities may include singing, dancing, acting and/or playing a musical instrument. This course may be repeated for a maximum of 8 units.

TH 147 
MUSICAL THEATRE PRODUCTION FOR LEADING ROLES 3 UNITS
Class hours:1 lecture/7 lab
Prerequisite: By audition.
This course involves participation in a major Theatre Department musical production in a leading role. Activities will include singing, dancing, acting, and/or playing of a musical instrument. This course may be taken for a maximum of 12 units.

TH 150 
APPRCIATION AND HISTORY OF THE MOTION PICTURE 3 UNITS
Class hours:3 lecture
Prerequisite: None.
This course examines the art of motion picture and their impact upon society. It includes the viewing and critical analysis of feature films in various thematic categories. (Formerly TH 50)
Transfer Credit:CSU;UC

TH 151 
MOTION PICTURES, RADIO AND TELEVISION 3 UNITS
Class hours:3 lecture
Prerequisite: None.
This is a broad survey of the history, theory, and production techniques of motion pictures, radio, and television, with emphasis on the form, content, and social impact of each. Students will participate in at least one field trip to a motion picture, radio, or television studio. (Formerly TH 51)
Transfer Credit:CSU

TH 152 
INTRODUCTION TO BROADCASTING 3 UNITS
Class hours:3 lecture
Prerequisite: None.
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, the use of audio and video tape, studio procedure, and station staffing as well. Field trips to radio and television facilities are included. (Formerly TH 52)
Transfer Credit:CSU

TH 153
MOTION PICTURE PRODUCTION 3 UNITS
Class hours:2 lecture/4 lab
Prerequisite: None.
This is an introductory course in the elements of motion picture production. Students create short films in the Super 8 mm. format. (Formerly TH 53)
Transfer Credit:CSU

TH 155
RADIO PRODUCTION 3 UNITS
Class hours:2 lecture/3 lab
Prerequisite: None.
This course is a study and practice of production and departments involved in radio broadcasting. Students make actual broadcasts and recordings and are responsible for staffing and some programming of the campus radio station WPMD, 1700 AM. This course may be taken for a maximum of 12 units. (Formerly TH 55)
Transfer Credit:CSU

TH 156
VIDEO PRODUCTION 3 UNITS
Class hours:1 lecture/5 lab
Prerequisite: None.
This class provides practice in basic video production and editing. The focus will be on field video production and off-line digital editing. Students will create video projects, work in teams, and learn about producing, directing, camera operation, and post-production of video. This course may be taken for a maximum of 12 units. (Formerly TH 56)
Transfer Credit:CSU

TH 159
MULTICULTURAL FILM 3 UNITS
Class hours:3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: ENGL 52 or ENGL 155 or equivalent with a grade of Credit 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. (Formerly TH 59)
Transfer Credit:CSU;UC

TH 160
GREAT FILM DIRECTORS 3 UNITS
Class hours:3 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a survey course on the art and social impact of the film director. Through a series of collective film screenings, lectures, and discussions, students will analyze individual filmmakers. This course may be taken for a maximum of 6 units. (Formerly TH 60)
Transfer Credit:CSU

TH 212
SCENE STUDY 3.5 UNITS
Class hours:3 lecture/2 lab
Prerequisite: TH 110 or equivalent with a grade of Credit or “C” or higher.
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 M. am. Students will explore multiple objectives, acting between the lines, and techniques for absurd plays and farce. (Formerly TH 12)
Transfer Credit:CSU;UC

TH 213
HISTORICAL STYLES OF ACTING 3.5 UNITS
Class hours:3 lecture/2 lab
Prerequisite: TH 110 or equivalent with a grade of Credit or “C” or higher.
In this course students will learn acting methods and styles needed to perform in plays written before the 19th century. These may include plays from ancient Greece, Commedia dell’Arte, Shakespeare and his contemporaries, the Spanish Golden Age, English Restoration, French neoclassicism, Moliere, and 18th century authors of various nationalities. Students will also explore vocal production, movement patterns, costumes, and social modes and manners for each period studied. (Formerly TH 13)
Transfer Credit:CSU;UC

TH 216
ACTING FOR THE CAMERA 3 UNITS
Class hours:2 lecture/4 lab
Prerequisite: TH 110 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is designed for the experienced acting student to adapt stage acting techniques for the motion picture and television camera. Emphasis will be placed on gaining an understanding of camera shots, angles, the shooting process, auditioning and actor behavior in front of the camera. This course may be repeated for a maximum of 6 units. (Formerly TH 16)
Transfer Credit:CSU

TH 221
COSTUMING FOR THE STAGE 3 UNITS
Class hours:2 lecture/3 lab
Prerequisite: None.
This course introduces the student to the principles and methods of costume crafts for stage purposes. Although design and construction are accentuated, the approach to costuming for the stage is underscored by an historical perspective. This course may be taken for a maximum of 6 units. (Formerly TH 21)
Transfer Credit:CSU;UC

TH 222
STAGE LIGHTING 3 UNITS
(CAN DRAM 10)
Class hours:2 lecture/3 lab
Prerequisite: None.
This course introduces the student to the theory and practice of modern stage lighting. Emphasis is placed on the design and function of lighting equipment and control systems, as well as color theory, the historical perspective, and hands-on experience. (Formerly TH 22)
Transfer Credit:CSU;UC

TH 226
INTRODUCTION TO SCENIC DESIGN 2 UNITS
Class hours:1 lecture/3 lab
Prerequisite: None.
This course introduces the student to the basic principles and techniques of scenic design for the theatre. The class will be involved in the conceptualization, analysis, and actual exploration of the design process. Emphasis will be placed on the development of the individual’s design capabilities and a knowledge of contemporary design approaches. (Formerly TH 26)
Transfer Credit:CSU;UC

TH 254
ADVANCED MOTION PICTURE PRODUCTION 3 UNITS
Class hours:2 lecture/4 lab
Prerequisite: TH 153 or equivalent with a grade of Credit or “C” or higher.
This is an advanced course in the elements and practice of motion picture production in super 8mm film. Students create and direct advanced motion picture projects. (Formerly TH 54)
Transfer Credit:CSU
Welding Internship provides
This course teaches the principles and practice of short-form writing for motion pictures and television. Feature length and short screenplays will be developed in class. Dramatic films and television programs will be analyzed and evaluated for their story structure. This course may be taken for a maximum of 6 units. (Formerly TH 58) Transfer Credit: CSU

Typing/Keyboarding
See BCOT
(Business Computerized Office Technologies)

Welding
(Technology Division)

Welding Occupational Work Experience 3-4 Units
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Welding work experience 73 or 20 hours of employment per week for Welding work experience 74. The employment must be in a job related to the student’s educational goal. Corequisite: (1) enrollment in the Welding vocational program with 7 or more units including occupational work experience. Work experience/career internship provides the opportunity for welding students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to the major and job skills must be completed on the job/training site. These courses may be taken for a maximum of 15-16 units.

Welding Fundamentals 4 Units
Class hours: 2 lecture/6 lab
Prerequisite: WELD 210L or equivalent with a grade of Credit or "C" or higher. 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. Pipeflanges and fittings will be identified as to alloy content and applicable welding procedures. (Formerly WELD 43)

Welding Fundamentals 2 Units
Class hours: 1 lecture/3 lab
Prerequisite: WELD 10 or WELD 110 and WELD 120 or equivalent with grades of Credit or “C” or higher, or appropriate work experience.

Corequisite: None.

This advanced course develops the techniques of maintenance welding including terminology, metal identification, heat treating, and welding of dissimilar metals. Emphasis is placed on following welding procedures as they relate to the job. (Formerly WELD 48)

Welding Fundamentals 2 Units
Class hours: 1 lecture/3 lab
Prerequisite: None.

This is an introductory course designed to familiarize the student with the welding trade. Emphasis is placed on technical and practical applications of shielded metal arc, oxy-acetylene, gas metal arc, and gas tungsten arc welding processes as well as safety, weld testing, and the effects of welding heat on metals. (Formerly WELD 10) Transfer Credit: CSU
Announcement of Courses

WELD 110
**OXYACETYLENE WELDING** 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: None.
This is an introductory course with emphasis on welding, brazing, braze welding, and flame cutting using the oxy-acetylene process for the beginning student welder. Related classroom instruction is given in the technical aspects of the process. (Formerly WELD 12)
Transfer Credit: CSU

WELD 120
**BEGINNING ARC WELDING** 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: None.
Corequisite: None.
Recommendation: WELD 100 or WELD 110 or equivalent with a grade of Credit or “C” or higher or concurrent enrollment, or appropriate work experience.
This is a course designed for the beginning student welder covering the technical and practical aspects of the shielded metal arc welding (SMAW), gas metal arc welding (GMAW), flux cored arc welding (FCAW) and submerged arc welding (SAW) processes. Welding may be done in all positions on carbon steels. Emphasis is also placed on the operation of manual and semi-automatic oxyacetylene flame cutting equipment. (Formerly WELD 14)
Transfer Credit: CSU

WELD 130
**GAS TUNGSTEN ARC WELDING FUNDAMENTALS** 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: None.
Corequisite: None.
Recommendation: WELD 100 or WELD 120 or equivalent with a grade of Credit or “C” or higher or concurrent enrollment, or appropriate work experience.
This is a course 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. (Formerly WELD 25)
Transfer Credit: CSU

WELD 170
**STRUCTURAL FABRICATION** 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: WELD 100 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: WELD 170 or equivalent with a grade of Credit or “C” or higher.
This course is 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. (Formerly WELD 17)
Transfer Credit: CSU

WELD 200
**INTERMEDIATE ARC WELDING** 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: WELD 120 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
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), flux cored arc (FCAW), and submerged arc (SAW) welding processes. Related classroom instruction is given in the technical data pertaining to these processes. (Formerly WELD 20)
Transfer Credit: CSU

WELD 210L
**ARC WELDING APPLICATIONS** 2 UNITS
Class hours: 6 lab
Prerequisite: WELD 200 or equivalent with a grade of Credit or “C” or higher.
This advanced course is designed to further increase the manipulative skills and technical knowledge of the student welder using the gas tungsten arc welding (GTAW) process on .020” to .030” thickness metals as well as welding the root bead on high pressure pipe. All welding samples will comply with standards set by the American Welding Society or industry. This course may be taken for a maximum of 4 units. (Formerly WELD 46)
Transfer Credit: CSU

WELD 220
**CERTIFICATION AND LICENSING FOR WELDERS** 2 UNITS
Class hours: 2 lecture
Prerequisite: WELD 200 or equivalent with a grade of Credit or “C” or higher or concurrent enrollment, or appropriate work experience.
Corequisite: None.
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. (Formerly WELD 33)
Transfer Credit: CSU

WELD 240
**ADVANCED GAS TUNGSTEN ARC WELDING LABORATORY** 2 UNITS
Class hours: 6 lab
Prerequisite: WELD 130 or equivalent with a grade of Credit or “C” or higher.
This is an advanced welding course using the gas tungsten arc welding (GTAW) process. This course is designed to further the skills of the student in this process. Special emphasis is placed on the welding of ferrous and non-ferrous metals in the vertical position. This course may be taken for a maximum of 4 units. (Formerly WELD 38)
Transfer Credit: CSU

WELD 250L
**GAS TUNGSTEN ARC WELDING APPLICATIONS** 2 UNITS
Class hours: 6 lab
Prerequisite: WELD 240 or equivalent with a grade of Credit or “C” or higher.
This advanced course is designed to further increase the manipulative skills and technical knowledge of the student welder using the gas tungsten arc welding (GTAW) process on .020” to .030” thickness metals as well as welding the root bead on high pressure pipe. All welding samples will comply with standards set by the American Welding Society or industry. This course may be taken for a maximum of 4 units. (Formerly WELD 46)
Transfer Credit: CSU

WOMEN’S STUDIES
(Humanities and Social Sciences Division)

WS 101
**ISSUES FOR WOMEN IN AMERICAN SOCIETY** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.

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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

WOODWORKING MANUFACTURING TECHNOLOGIES

( Technology Division)

WMT 1 (Not degree applicable) 
OPEN ENTRY/EXIT WOODWORKING 0 UNIT
Class hours: 3 hrs. arr. 
Open entry/open exit 
Prerequisite: None. 
Corequisite: None. 
Recommendation: None. 
This open entry/exit course is designed to provide between semester access to the woodworking program for students to develop, enhance, and refine their woodworking skills. Students are accepted into existing courses on a space-available basis dependent on the student's 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. This course may be taken until the end of the semester or 360 instructional hours, whichever comes first. (Formerly WMT 10)

WMT 43/44 (Not degree applicable) 
WOODWORKING MANUFACTURING TECHNOLOGIES OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Woodworking Manufacturing work experience 73 or 20 hours of employment per week for Woodworking Manufacturing work experience 74. The employment must be in a job related to the student's educational goal.
Corequisite: Enrollment in 7 or more units, including Woodworking Manufacturing Occupational Work Experience, in a declared technology major. Three units of Woodworking Manufacturing Occupational Work Experience requires 180 non-paid hours of work or 225 paid hours of work per semester.
Work experience/career internship provides the opportunity for Woodworking Manufacturing Technology students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. These courses may be taken for a maximum of 15-16 units. (Formerly WMT 73/74)

WMT 101 INTRODUCTION TO WOODWORKING 2 UNITS
Class hours: 1 lecture/3 lab 
Prerequisite: None. 
This introductory woodworking course acquaints the students 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. (Formerly FMT 1/WMT 10.1) 
Transfer Credit:CSU

WMT 102 MACHINE WOOD TECHNOLOGY 4 UNITS
Class hours: 2.5 lecture/5.5 lab 
Prerequisite: WMT 101 or equivalent with a grade of Credit or “C” or higher. 
Corequisite: None. 
Recommendation: None. 
This course increases the student's skill in the use of hand tools, portable power tools, and machinery. Topics include wood technology and joinery as it pertains to panel construction in free standing furniture casework. This course may be taken for a maximum of 8 units. (Formerly FMT 12/WMT 10.2) 
Transfer Credit:CSU

WMT 103 MACHINE WOOD TECHNOLOGY II 4 UNITS
Class hours: 2.5 lecture/5.5 lab 
Prerequisite: WMT 101 or equivalent with a grade of Credit or “C” or higher. 
Corequisite: None. 
Recommendation: None.
### WMT 130
**Furniture Design**  
3 UNITS  
Class hours: 2 lecture/4 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course is designed to introduce the student to the process of furniture design. Topics include conceptualization, drawing, engineering, ergonomics, style and mockups. This course may be taken for a maximum of 6 units.  
Transfer Credit: CSU

### WMT 132
**Chair Design and Construction**  
4 UNITS  
Class hours: 2 lecture/6 lab  
Prerequisite: WMT 103 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
This is a course in chairmaking for the advanced woodworking technology student. It includes the basic techniques of design, construction and production of chairs. The student will design and build both wood and exposed wood frame chairs. This course may be taken for a maximum of 8 units. (Formerly FMT 32/WMT 13.2)  
Transfer Credit: CSU

### WMT 133
**Frame Making**  
4 UNITS  
Class hours: 2 lecture/6 lab  
Prerequisite: WMT 103 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.  
Corequisite: None.  
Recommendation: None.  
This course introduces the fundamental principles and techniques of frame making for upholstered furniture. Topics include design, engineering, layout, machine woodworking and frame assembly. This course may be taken for a maximum of 8 units. (Formerly FMT 31/WMT 13.4)  
Transfer Credit: CSU

### WMT 134
**Outdoor Furniture**  
2.5 UNITS  
Class hours: 2 lecture/2 lab  
Prerequisite: WMT 101 and WMT 102 or WMT 103 or equivalent with grades of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
This course instructs students in the design and construction of outdoor furniture. Projects include tables, chairs, benches, lounges, stands and umbrellas. This course may be taken for a maximum of 10 units. (Formerly WMT 13.7)  
Transfer Credit: CSU

### WMT 148
**Furniture Making and Manufacturing**  
4 UNITS  
Class hours: 2 lecture/6 lab  
Prerequisite: WMT 103 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.  
Corequisite: None.  
Recommendation: None.  
This course teaches basic elements of production furniture design, prototype building, and product evaluation. The course acquaints the student with all phases of furniture production as a profession. Students design, build, and test market furniture samples from which items will be selected for manufacturing in the Production Furniture Making and Manufacturing course (WMT 24.8). This course may be taken for a maximum of 8 units. (Formerly FMT 35/WMT 14.8)  
Transfer Credit: CSU

### WMT 151
**Introduction to Cabinetmaking**  
4 UNITS  
Class hours: 2.5 lecture/5.5 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course introduces the student to the methods, materials, tools, and machinery used in the construction of traditional and European cabinetry. Classroom topics include the history, design, fabrication, and safe use of woodworking machinery and materials involved in cabinet construction. (Formerly FMT 97.01/WMT 15.1)  
Transfer Credit: CSU

### WMT 153
**32mm System of Cabinetmaking**  
4 UNITS  
Class hours: 2.5 lecture/5.5 lab  
Prerequisite: WMT 151 or equivalent with a grade of Credit or “C” or higher.  
In this course the student learns the fundamental information and skills related to the 32mm system of cabinet manufacturing. It includes review of the system with hands-on experience in product design and layout of boring patterns, including machine operation in building 32mm cabinets. (Formerly FMT 14/WMT 15.3)  
Transfer Credit: CSU

### WMT 155
**Architectural Millwork**  
4 UNITS  
Class hours: 2.5 lecture/5.5 lab  
Prerequisite: WMT 151 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.  
Corequisite: None.  
Recommendation: None.  
This course introduces the student to the methods, materials, tools, and machinery used in the manufacturing and installation of architectural millwork. Classroom topics include the history, design, fabrication, installation, and safe use of woodworking machinery and materials involved in architectural millwork and finished carpentry. This course may be taken for a maximum of 8 units. (Formerly FMT 97.03/WMT 15.5)  
Transfer Credit: CSU

### WMT 171
**Introduction to Wooden Boat Building**  
3 UNITS  
Class hours: 2 lecture/4 lab  
Prerequisite: WMT 101 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: WMT 103 or equivalent with a grade of Credit or “C” or higher.  
This course is an introduction to the methods and materials used in the construction of modern and traditional wooden boats. Classroom topics include the history, design, engineering, and safe use of woodworking techniques and materials involved in wooden boat construction. This course may be taken for a maximum of 6 units. (Formerly FMT 69.9/WMT 17.1)  
Transfer Credit: CSU

### WMT 181
**Introduction to Computer Operations for Cabinetmaking and Design**  
2.5 UNITS  
Class hours: 2 lecture/2 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course provides the student with the background and skills required to understand, research, purchase and operate basic woodworking and cabinetmaking computer design systems. This course may be taken for a maximum of 5 units. (Formerly FMT 61/WMT 18.1)  
Transfer Credit: CSU

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WMT 201
WOODWORKING WITH
HAND TOOLS 4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces students to the hand tools used in woodworking. Topics include sharpening, tool identification, wood technology and hand plane adjustment for optimum performance. This course may be taken for a maximum of 8 units. (Formerly WMT 20.1)

WMT 202
ADVANCED MACHINE
WOOD TECHNOLOGY 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: WMT 103 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course 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 for a maximum of 8 units. (Formerly WMT 20.1)

WMT 203
WOOD VENEERING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: WMT 103 and WMT 201 or equivalent with grades of credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course introduces students to the technology of wood veneering. Topics include material identification, veneer selection, pattern layout, substrate selection and clamping, methods of lay-up veneer on various types and shapes of substrates. This course may be taken for a maximum of 6 units.
Transfer Credit: CSU

WMT 204
THE WORKBENCH CLASS 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: WMT 103 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course provides the student with the background and skills required to research, design, purchase materials, select hardware, and manufacture a workbench. This course may be taken for a maximum of 8 units. (Formerly FMT 97.02/WMT 21.1)
Transfer Credit: CSU

WMT 212
ROUTERS AND ROUTER TABLES 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: WMT 101 or WMT 151 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: WMT 102 or WMT 103 or equivalent with a grade of Credit or “C” or higher.
In this course students will design and manufacture “The Ultimate Router Table.” The router table is one of the most versatile and essential pieces of equipment for any woodworker. Course topics include comparison and evaluation of routers available on the market, design, construction, and use of jigs and fixtures. This course may be taken for a maximum of 8 units. (Formerly WMT 21.2)
Transfer Credit: CSU

WMT 218
POLYCHROMATIC AND
CLOSED FORM TURNING 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: WMT 101 and WMT 118 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: WMT 102 or WMT 103.
This advanced woodturning course is designed to enhance the student skill. Topics include polychromatic bowl construction, closed form vessel turning and other advanced skills. This course may be taken for a maximum of 4 units.
Transfer Credit: CSU

WMT 219L
WOODTURNING LAB 2.5 UNITS
Class hours: 8 lab
Prerequisite: WMT 101 and WMT 118 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: WMT 102 or WMT 103.
This course allows students to perfect and hone skills acquired during previous woodturning 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 for a maximum of 12.5 units. (Formerly WMT 22.9)
Transfer Credit: CSU

WMT 228L
PROJECT COMPLETION LAB 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: WMT 101 or WMT 151 and WMT 102 or WMT 103 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course provides students with the necessary time and facility to continue working a project to completion. Instruction is project specific with emphasis on problem solving and detail. This course may be taken for a total of 8 units. (Formerly WMT 22.8)
Transfer Credit: CSU

WMT 233
MORRIS CHAIR 4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: WMT 101, WMT 102 and WMT 103 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course focuses on the history and design of the Morris Chair. Hand tools, machinery and 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 for a maximum of 12 units.
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable credit courses unless otherwise noted.
Announcement of Courses

WMT 244
CHEST OF DRAWERS 4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: WMT 102, WMT 103, WMT 132 and WMT 201 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This advanced course will reinforce skills learned in previous classes and challenge the student to demonstrate the ability to plan, design, fabricate and finish a chest of drawers. The course will allow the student more in-depth experience in solid-wood-panel side and frame-and-panel methods of construction. The focus will be on the carcass as well as on drawer construction. Topics include history, planning, design, fabrication and finishing as they pertain to building a chest of drawers. The course may be taken for a maximum of 8 units.
Transfer Credit: CSU

WMT 246
ROCKING CHAIR 4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: WMT 102, WMT 103, WMT 132 and WMT 201 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This advanced course will reinforce skills learned in previous classes and challenge the student to demonstrate the ability to plan, design, fabricate and finish a rocking chair. 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 rocking chair. The course may be taken for a maximum of 8 units.
Transfer Credit: CSU

WMT 248
PRODUCTION FURNITURE MAKING AND MANUFACTURING 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: WMT 148 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
The course enables the students to work as a team in the manufacturing of a limited edition of student-designed furniture items for on-campus use. The course includes all the steps from setting up a furniture plant to building a finished furniture product. This course may be taken for a maximum of 12 units. (Formerly FMT 45/WMT 24.8)
Transfer Credit: CSU

WMT 249L
FURNITURE MANUFACTURING SPECIALTY 2.5 UNITS
Class hours: 8 lab
Prerequisite: WMT 101 and WMT 102 or WMT 103 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course provides the student additional opportunity to increase woodworking skills by the use of machine tools and by the development of projects in the cabinetmaking field. This course may be taken for a maximum of 8 units. (Formerly FMT 36/WMT 24.9)
Transfer Credit: CSU

WMT 251
ADVANCED CABINETMAKING 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: WMT 153 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course provides the student additional opportunity to increase woodworking skills by the use of machine tools and by the development of projects in the cabinetmaking field. This course may be taken for a maximum of 8 units. (Formerly FMT 25/WMT 25.1)
Transfer Credit: CSU

WMT 253
ADVANCED 32MM SYSTEM OF CABINETMAKING 3 UNITS
Class hours: 1 lecture/7 lab
Prerequisite: WMT 153 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course increases student skill and knowledge related to the 32mm system of cabinetmaking. Topics include application of business skills as they relate to the cabinetmaking manufacturing industry and advanced 32mm production techniques. This course may be taken for a maximum of 9 units. (Formerly FMT 46/WMT 26.8)
Transfer Credit: CSU

WMT 258
MANTELS AND WALL SYSTEMS 4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: WMT 102 or WMT 103 and WMT 155 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course introduces the student to the methods, materials, tools and machinery used in the design, manufacturing and installation of mantels and wall systems. Topics include the history, design, milling, assembly and installation of mantels and wall paneling. A major emphasis will be on the safe use of woodworking machinery and materials involved in architectural millwork. This course may be taken for a maximum of 8 units.
Transfer Credit: CSU

WMT 258
PRODUCTION CABINETMAKING AND MANUFACTURING 5 UNITS
Class hours: 4 lecture/4 lab
Prerequisite: WMT 153 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course enables the students to work as a team in the design, manufacturing, and installation of cabinets for on-campus use. This course includes instruction in production techniques, materials science, cost estimating, time management, and scheduling. This class may be taken for a maximum of 15 units. (Formerly FMT 46/WMT 26.8)
Transfer Credit: CSU

WMT 269L
CABINETMAKING MANUFACTURING SPECIALTY 2.5 UNITS
Class hours: 8 lab
Prerequisite: WMT 153 or WMT 155 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course allows students to perfect and hone skills acquired during previous 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 for a maximum of 10 units. (Formerly WMT 26.9)
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
WMT 281
ADVANCED COMPUTER OPERATIONS FOR CABINETMAKING AND DESIGN 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: WMT 181 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course provides the student with the advanced skills and knowledge required to better utilize cabinet manufacturing computer systems and software. Classroom topics will include cutting list development, panel optimizing, job/cost estimating, and introduction to catalog writing for software customization. This course may be taken for a maximum of 5 units. (Formerly FMT 62/WMT 28.1)
Transfer Credit: CSU

WORD PROCESSING
SEE BCOT
(Business Computerized Office Technologies)

ZOOLOGY
(Science/ Engineering/ Math Division)

ZOOL 120
INTRODUCTION TO ANIMAL BIOLOGY 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is a survey course in animal biology. Included are a taxonomic review of major invertebrate and vertebrate groups, animal adaptations and behavior, basic anatomy and physiology (with emphasis on vertebrates), cell biology, reproduction and development, genetics, ecology, and evolution. Laboratory dissection is used to illustrate these principles. This is designed as an entry level course for both majors and non-majors in biology. (Formerly ZOOL 10)
Transfer Credit: CSU; UC

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
ACKLAND, DEAN (1987)
Instructor
Coordinator/Supervisor of Student Activities
B.S., California State University, Long Beach
M.A., Azusa Pacific

ALEXANDER, CYNTHIA (2000)
Instructor
Educational Technology
B.A., California State University, Long Beach
J.D., Western State University

ALVAREZ, LYDIA (2000)
Instructor
English
B.A., Pomona College
M.A., California Polytechnic State University, Pomona

ANDERSON, LOWELL (1962)
Professor
Real Estate
A.A., Weber Junior College, Utah
B.S., University of Utah
M.S., San Diego State University

ARAGON, RICHARD (1994)
Instructor
Automotive Mechanical Repair
B.A., California State University, Los Angeles

ARCE, CARLOS (1991)
Assistant Professor
Spanish
B.A., California State University, Chico
M.A., California State University, Sacramento

ARFWEDSON, CHRISTINE (1997)
Assistant Professor
Nursing Education
B.S., Nursing University of the State of New York
M.N., University of Phoenix

ARELLENO, CYNTHIA (2000)
Instructor
Speech Communication
B.A., Point Loma Nazarene College
M.A., California State University, Fullerton

ASHE, SUZANNE (1986)
Professor
English
B.A., Rosary College, River Forest, IL
M.A., University of California, Los Angeles

ASYIDDAO, VALENTIN (1992)
Assistant Professor
English
B.A., Ateneo de Manila University
M.A., California State University, Long Beach

ASPEN, ROBERT (1979)
Professor
Auto Body
A.A., Cerritos College

AUSTIN, ANTHONY (1980)
Associate Professor
Electronics
B.A., California State University, Los Angeles

BAILEY, KIM (1999)
Instructor
Nursing Education
M.S.N., University of Phoenix
Ph.D., University of London

BALMAGES, MARY (1992)
Associate Professor
Court Reporting
A.A., Fullerton Junior College
B.A., University of California, Berkeley

BARON, TONY (1986)
Instructor
Automotive Technology
A.A., A.S., Pierce College
B.A., California State University, Los Angeles

BAYER, CONNIE (1966)
Professor
Health and Physical Education
B.S., Wisconsin State College
M.A., California State University, Los Angeles

BEALE, DARRYL K. (1973)
Professor
Psychology
Ph.D., University of Southern California

BELLAS, MONICA (2000)
Instructor
Anthropology
B.A., California State University, Northridge
M.A., Ph.D., University of California, Riverside

BELROD, ALEXANDER (1964)
Professor
English
B.A., M.A., California State University, Long Beach

BELROD, ALEXANDER (1964)
Professor
English
B.A., M.A., California State University, Long Beach

BELYEA, STEVEN (2000)
Instructor
Reading
B.A., M.S., California State University, Fullerton

BENDER, W. JON (1988)
Instructor
Automotive Technology
A.A., A.S., Los Angeles Pierce College
B.A., California State University, Los Angeles

BERKLITE, STEVEN L. (1985)
Associate Professor
Automotive Technology
B.A., California State University, Long Beach
M.A., Pepperdine University

BERRY, PATRICIA A. (1978)
Professor
English as a Second Language
A.A., Santa Ana College
B.A., M.A., California State University, Fullerton
BETANCOURT, DAVID (1999)  
Assistant Professor/Director of Bands  
Music  
B.A., Berklee College of Music  
M.M., N. Arizona University

BETTINO, M.L. (1991)  
Administrative Dean, Technology Training & Distance Education  
B.A., M.A., California State University, Northridge

BLACKMUN, EUGENE (1983)  
Professor  
Business  
A.A., Long Beach City College  
B.S., Brigham Young University

BLOOMFIELD, EDWARD H. (1969)  
Professor  
Philosophy  
B.A., Whittier College  
M.Div., Harvard University  
M.A., Ph.D., Claremont Graduate School

BOARDMAN, CONSTANCE (1991)  
Associate Professor  
Biology  
B.S., M.S., California State University, Long Beach

BOYLE, JOHN (1974)  
Professor  
Biology  
B.A., M.A., University of California, Santa Barbara

BRAUN, SHARON K. (1997)  
Instructor  
Child Development  
M.A., Pacific Oaks

BRADBURY, JEFFERY (1999)  
Instructor  
Chemistry  
B.S., Biola University  
M.S., California Polytechnic State University, Pomona

BREIT, CRAIG A. (1985)  
Assistant Professor  
Theatre Arts  
B.A., M.A., California State University, Long Beach

BRIDGES, GLORIA (1999)  
Instructor/Counselor  
B.A., University of California, Los Angeles  
M.A., California State University, Dominguez Hills

BRODERICK, WILLIAM E. (1976)  
Professor  
Reading  
B.A., M.Ed., University of Hawaii  
Ph.D., University of Southern California

BURNS, MARLA (1990)  
Professor  
English  
A.A., Saddleback College  
B.A., California State University, San Jose  
M.A., California State University, San Francisco

BUSCHAUER, ROBERT (1989)  
Professor  
Physics  
B.S., California Polytechnic University, Pomona  
M.A., Ph.D., University of California, Irvine

BUTLER, SUSAN (1995)  
Instructor  
History  
B.A., George Washington University  
M.A., Ph.D., University of California, Los Angeles

CABATO, FROYLAN (2000)  
Instructor  
Spanish  
B.A., M.A., California State University, Los Angeles

Instructor  
Health, Physical Education/Athletics  
B.A., M.A., Stanford University

CAINES, THOMAS R. (1997)  
Instructor  
Health, Physical Education/Athletics  
B.A., California State University, Long Beach  
M.Ed., Azusa Pacific University

CALLAHAN, PATRICK (1990)  
Professor  
Coordinator of Student Activities  
B.A., California State University, Fresno  
M.A., Azusa Pacific University

CAMERON, RICHARD D. (1996)  
Instructor  
Journalism  
B.A., M.A., California State University, Fresno

CAMPOLO, ROBERT B. (1997)  
Assistant Professor  
Theatre Arts  
B.F.A., School of Visual Arts  
M.F.A., University of California, Los Angeles

CARNEY, DANIELLE (2000)  
Instructor  
English  
B.A., M.A., California State University, Long Beach

CASAS, RALPH P. (1995)  
Assistant Professor  
Pharmacy Technology  
A.A., Whittier College  
M.A., Fuller Theological Seminary  
Ph.D., University of Southern California

CHALMERS, GRAHAM (1991)  
Associate Professor  
Mathematics  
B.A., University of Waterloo  
M.A., Ph.D., University of California, Berkeley

CHAVEZ, ERLINDA (1989)  
Instructor  
Cosmetology  
A.A., Cerritos College

CHESTER, ROBERT (1987)  
Associate Professor  
English  
B.A., M.A., California State University, Northridge

CHOWEN, JUDITH (1981)  
Associate Professor  
Accounting  
B.S., M.S., California State University, Long Beach

CHRISTIE, WILLIAM C. (1999)  
Instructional Dean, Business  
B.A., California State University, Long Beach  
M.A., California State University, Los Angeles

CLARKE, MARY (1980)  
Instructor  
Mathematics  
B.A., M.A., California State University, Long Beach

CLEGG, LINDA D. (1994)  
Assistant Professor  
English  
A.A., West Los Angeles College  
B.A., M.A., California State University, Dominguez Hills

CLEMANS, SUSANNA (1986)  
Professor  
English  
A.A., Orange Coast College  
B.A., M.A., California State University, Fullerton

CIDD, GERALDINE A. (1997)  
Assistant Professor  
Reading  
B.A., Rider College  
M.A., Seton Hall University
COLBATH, G. KENT (1989)
Professor
Earth Science
B.S., Oregon State University
M.S., University of California, Los Angeles
Ph.D., University of Oregon

COLGAN, ROBERT T. (1993)
Assistant Professor
Woodworking Manufacturing Technologies
A.A., Fullerton College
B.V.E., California State University, Long Beach

CONNAL, JANICE S. (1988)
Counselor
A.A., Fullerton College
B.A., Chapman College
M.A., California State University, Fullerton
Ph.D., University of California, Los Angeles

CONOVER, SANDY R. (1991)
Assistant Professor
Nursing Education
A.S., Long Beach City College
B.S., California State University, Fullerton
M.S., California State University, Long Beach

COPPENGER, MICHAEL (1980)
Professor
Photography
A.A., Long Beach City College
B.A., California State University, Long Beach
M.A., Pepperdine University

COURTER, LUCIA (1987)
Associate Professor
English as a Second Language
B.A., California State University, Fullerton
M.A., American University in Cairo, Egypt

DAVIS, RICHARD H. (1975)
Professor
Business Computer Information Systems
A.A., Compton College
B.S., California State University, Long Beach
M.B.A., California State University, Dominguez Hills

DEFRANCE, FRANCINE L. (1976)
Professor
English
B.A., M.Ed., Temple University
M.A., California State University, Long Beach

Instructor
Mathematics/Engineering
B.S., Ain Shams University, Cairo, Egypt
M.S., California State University, Long Beach

DONNELLY, LYNN A. (1997)
Instructor
English
B.A., California State University, Fullerton
M.A., California State University Polytechnic University, Pomona

DRANT, SANDRA (1992)
Associate Professor
Court Reporting
A.A., Cypress College
B.A., Chapman College
M.A., Pepperdine University

DUFF, KIMBERLEY, (1999)
Instructor
Psychology
B.A., University of California, Santa Barbara
M.A., Ph.D., University of Illinois, Chicago

DUNROE, WILLIAM D. (1979)
Professor
Psychology
B.A., M.A., California State University, Fullerton
Ph.D., Claremont Graduate School

DURAN, AGNES H. (1987)
Professor
Reading/Office Technologies
B.A., M.A., California State University, Los Angeles

Professor
Mathematics
B.A., California State University, Long Beach
M.S., University of LaVerne
M.A., California State University, Fullerton

EGAN, ISABELLE (1989)
Professor/Counselor
Business
B.A., Marylhurst College
M.A., University of North Dakota
Ph.D., University of Oregon

ELIZONDO, SANDRA (2000)
Instructor
Business
B.S., California State University, Los Angeles
J.D., Loyola Law School

ENQUIST, MARVIN (1990)
Associate Professor
Administration of Justice
A.A., Cerritos College
B.S., M.S., Pepperdine University

ERNEST, ROGER (2000)
Instructor
English
B.A., California State University, Long Beach
M.A., California State University, Dominguez Hills

EVANS, WILLIAM M. (1974)
Professor
Accounting
B.S., University of California, Berkeley
M.A., California State University, Los Angeles

FABISH, DAVID M. (1994)
Associate Professor
English
B.A., California State University, Long Beach
M.F.A., University of Iowa

FAILOR, JOLEEN (1976)
Professor
Dental Assisting
A.A., Fullerton Junior College
B.V.E., California State University, Long Beach

FALCON, DENNIS P. (1997)
Assistant Professor
Political Science
B.A., California State University, Long Beach
M.A., Southern Illinois University

FARINA, MICHAEL J. (1989)
Professor
Mathematics
B.S., M.S., Northern Illinois University

FELDSTEIN, THERESE (1988)
Professor
Mathematics
B.S., M.S., California State University, Northridge

Assistant Professor
History
B.A., M.A., California State University, Northridge

FINKELSTEIN, HY L. (1975)
Professor
Management
B.A., M.B.A., California State University, Long Beach

FOBI, CHARLENE (1988)
Professor
Nursing Education
M.S., B.S.N., University of Cincinnati
M.N., University of California, Los Angeles
Ed.D., Pepperdine University

FOLLET, KAY S. (1981)
Professor
Disabled Student Programs & Services
B.S., University of Southern California
M.A., California State University, Los Angeles
Ph.D., University of Southern California
FORTNER, ANTHONY (1999)
Instructor
Woodworking Manufacturing Technologies
B.A., California State University, Long Beach

FRANKLEY, ALLEN GIBBS (1958)
Professor
Drafting
B.S., University of Southern California
M.A., University of California, Los Angeles

FREIFIELD, MAX (1989)
Professor
Speech Communication
A.A., Phoenix College
B.S., University of Arizona
M.S., California State University, Los Angeles

FRONKE, MARK J. (1992)
Associate Professor
Accounting
B.S., University of Southern California

FUJIMOTO, NORMAN Y. (1994)
Instructional Dean, Science, Engineering and Mathematics
B.A., Loma Linda University
M.A.T., Andrews University

FUSCHETTO, SUSAN (2000)
Instructor
Computer and Information Sciences
B.A., National University
M.B.A., Pepperdine University

GAFFANEY, TODD W. (1975)
Instructor
Psychology
B.A., M.A., California State University, Northridge

GAIK, FRANK (1989)
Professor
English
B.S., McNeese State University
M.A., University of Arkansas
Ph.D., University of Southern California

GAYLORD, KENNETH (1991)
Instructor
Physical Education/Athletics
B.A., California State University, Long Beach
M.A., Azusa Pacific

GEORGE, PATTY (1999)
Instructor
Mathematics
B.A., M.A., M.S., University of California, Riverside

GERSITZ, LORRAINE (2000)
Librarian
B.A., M.L.S., Rutgers University

GLECKNER, CARRIE E. (1997)
Instructor
Health, Fitness/Wellness
B.A., New York University
M.A., University of Southern California

GRADIN, SUSAN (1999)
Instructor
Child Development
B.A., University of California, Santa Barbara
M.S., Pepperdine University

GRINDEL, JOHN A. (1995)
Executive Dean of Information Technology and Development
B.A., St. Mary's Seminary

GUEST-GRIFFITH, ALISON J. (1997)
Instructor
Art
B.A., University of Leicester, England
M.A., Ohio State University

GUY, GEORGINA (2001)
Instructor/Counselor
B.A., California State University, Dominguez Hills
M.S., California State University, Fullerton

HAAS, JOHN H. (1998)
Instructor
History
B.A., California State University, Los Angeles
Ph.D., Claremont Graduate School

HAMPTON, PRESTON (1989)
Professor/Counselor
A.B., University of California, Berkeley
M.A., Azusa Pacific University

HANKS, WENDELL G. (1966)
Professor
Speech Communication
A.A., Glendale College
B.A., University of California, Santa Barbara
M.A., California State University, Northridge
M.S., California State University, Long Beach

HANSON, KENNETH J. (1984)
Professor
Electronics
B.A., California State University, Los Angeles

HARBUS, CHESTER (1989)
Professor
Biology
B.A., St. Ambrose College
M.S., University of California, Los Angeles
Ph.D., Tulane University

HARMON, JANE M. (2001)
President/Superintendent
B.S., Moorhead State University
M.S., Bemidji State University
Ph.D., University of Texas

HAVICE, SALLY MORALES (1975)
Associate Professor
English
A.A., Cerritos College
B.A., M.A., California State University, Long Beach

HAYNES, W. DOUGLAS (1988)
Professor
Administration of Justice
A.A., Golden West College
B.S., M.S., California State University, Long Beach

HELBERG, BONNIE (1988)
Assistant Professor
Reading
B.A., M.A., California State University, Long Beach

HELFGOT, STEVEN R. (1986)
Vice President of Public Affairs
B.A., Washington University, St. Louis
M.A., Northwestern University
Ed.D., Northern Illinois University

HENRIQUES, JAMES (1988)
Associate Professor
Physics
B.S., M.S., Georgia State University

HENRY, FRED (1986)
Assistant Professor
Welding
Community College Ltd Service Credential, UCLA

HINRICHS, KEITH ALLEN (1965)
Professor
History
B.A., University of California, Berkeley
M.A., University of California, Los Angeles
Ed.D., Nova University
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Department</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIRANANDANI, JAYANANDA</td>
<td>Professor</td>
<td>Drafting</td>
<td>B. Tech., M. Tech., Indian Inst. of Tech., Kharagpur, India</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M.S., University of California, Berkeley</td>
</tr>
<tr>
<td>HOOAD, GRETCHEN A.</td>
<td>Professor</td>
<td>Business</td>
<td>B.A., University of California, Berkeley J.D., Western State University</td>
</tr>
<tr>
<td>HOGGARD, KEVIN</td>
<td>Professor</td>
<td>Theatre Arts</td>
<td>B.A., M.F.A., University of California, Riverside</td>
</tr>
<tr>
<td>HOHLY, MARGARET</td>
<td>Professor</td>
<td>Business Computer Information Systems</td>
<td>B.S., M.S., California State University, Long Beach M.S., California State University, Fullerton</td>
</tr>
<tr>
<td>HOPPE-NAGAO, ANGELA K.</td>
<td>Assistant Professor</td>
<td>Speech Communication</td>
<td>B.A., M.A., California State University, Fullerton</td>
</tr>
<tr>
<td>HORVATH, ELLEN</td>
<td>Professor</td>
<td>Nursing Education</td>
<td>B.A., Loyola Marymount M.A., California State University, Long Beach</td>
</tr>
<tr>
<td>HUSEMAN, PHIL</td>
<td>Dean of Student Activities</td>
<td></td>
<td>B.A., California State University, Los Angeles M.A., California Lutheran University</td>
</tr>
<tr>
<td>HOYLE, SHEELA</td>
<td>Instructor/Counselor</td>
<td>University of California, Berkeley</td>
<td>B.A., California State University, San Diego</td>
</tr>
<tr>
<td>HUBBERT, KIMBERLY</td>
<td>Instructor</td>
<td>Speech Communication</td>
<td>B.A., M.A., California State University, Fullerton</td>
</tr>
<tr>
<td>HUBER, ROBERT C.</td>
<td>Professor</td>
<td>Theatre Arts</td>
<td>B.A., California State University, Los Angeles M.A., Humboldt State University Ph.D., University of Southern California</td>
</tr>
<tr>
<td>HUGEN, MARK A.</td>
<td>Instructor</td>
<td>Mathematics</td>
<td>A.B. Secondary, Dordt College M.A., California State University, Fullerton</td>
</tr>
<tr>
<td>HUGHLETT, ROBERT C.</td>
<td>Professor</td>
<td>Director, Disabled Student Programs &amp; Services</td>
<td>B.A., St. Mary's College M.A., California State University, Los Angeles Ed.D., Nova University</td>
</tr>
<tr>
<td>IDEAL, BONNIE L.</td>
<td>Professor</td>
<td>Office Occupations</td>
<td>A.A., Antelope Valley College B.A., M.A., California State University, Long Beach</td>
</tr>
<tr>
<td>JACKSON, THOMAS</td>
<td>Professor</td>
<td>Accounting</td>
<td>A.A., Long Beach City College B.S., California State University, Long Beach B.S., M.B.A., University of Southern California</td>
</tr>
<tr>
<td>JAEGER, GEORGE A.</td>
<td>Professor</td>
<td>English</td>
<td>B.A., California State University, Long Beach M.A., California State University, Fullerton M.A., Ed.D., University of Southern California</td>
</tr>
<tr>
<td>JAIME, JENNIE</td>
<td>Instructor</td>
<td>Spanish</td>
<td>B.A., M.A., California State University, Los Angeles</td>
</tr>
<tr>
<td>JANOSOVA, ANITA M.</td>
<td>Instructor</td>
<td>Art and Design</td>
<td>B.F.A., M.F.A., School of Art Institute, Chicago</td>
</tr>
<tr>
<td>JENSEN, DEBORAH C.</td>
<td>Assistant Professor</td>
<td>Health, Physical Education/Athletics</td>
<td>B.S., California State University, Fullerton M.S., Louisiana Tech University</td>
</tr>
<tr>
<td>JOHNSON JR, ADOLPH</td>
<td>Dean of Academic Affairs</td>
<td></td>
<td>B.A., University of California, Santa Barbara M.A., M.P.A., Ph.D., University of Southern California</td>
</tr>
<tr>
<td>JOHNSON, ELLEN J.</td>
<td>Assistant Professor</td>
<td>Music</td>
<td>B.M., American Conservatory of Music M.M., California State University, San Diego</td>
</tr>
<tr>
<td>JOHNSON, JEANNE EVA</td>
<td>Professor</td>
<td>Cosmetology</td>
<td>B.V.E., California State University, Long Beach</td>
</tr>
<tr>
<td>JORDAN, WESLEY</td>
<td>Associate Professor</td>
<td>Mathematics</td>
<td>B.S., M.S., California State University, Long Beach</td>
</tr>
<tr>
<td>JUNTILLA, TIMOTHY J.</td>
<td>Instructor</td>
<td>English</td>
<td>B.A., California Lutheran University M.S., Illinois State University</td>
</tr>
<tr>
<td>KARVELIS, DONALD</td>
<td>Professor</td>
<td>History</td>
<td>B.A., M.A., Ed.D., University of California, Los Angeles</td>
</tr>
<tr>
<td>KASTAN, CYNTHIA</td>
<td>Professor</td>
<td>Art and Design</td>
<td>Diplome Normal, Sorbonne, University of Paris B.A., University of California, Berkeley B.F.A., M.F.A., Otis Art Institute, Los Angeles</td>
</tr>
<tr>
<td>KEEGAN, GREGORY J.</td>
<td>Associate Professor</td>
<td>Automotive Technology</td>
<td>A.A., Cerritos College</td>
</tr>
<tr>
<td>KEENAN, DIANE</td>
<td>Professor</td>
<td>Economics</td>
<td>B.A., California State University, Long Beach M.A., University of California, Los Angeles</td>
</tr>
<tr>
<td>KELLY, NANCY J.</td>
<td>Associate Professor</td>
<td>Health, Physical Education</td>
<td>B.S., M.Ed., Temple University</td>
</tr>
</tbody>
</table>
Faculty/Educational Administrators

KENNY, JAMES A. (1970)
Professor
Business Computer Information Systems
A.A., Cerritos College
B.S., Oklahoma State University
M.B.A., California State University, Fullerton
Ed.D., University of Southern California

KETCHAM, JULE (1999)
Instructor/Librarian
B.A., Chapman University
M.S.L.S., University of California, Los Angeles

Professor
Accounting
A.A., Fullerton College
B.A., M.B.A., California State University, Fullerton

KOSUTH, KATHRYN (1999)
Instructor
English
B.A., University of California, Los Angeles
M.A., California State University, Fullerton

KREGER, ROBERT (1991)
Professor
Earth Science
A.A., Des Moines Area Community College
B.A., Eastern Illinois University
M.A., Ph.D., University of Illinois

KREMER, NICK (2000)
Executive Dean of Community, Industry and Technology Education
B.A., Stanford University
M.A., Claremont Graduate University

KROGUE, R. KENT (1972)
Professor
Biology
A.A., Long Beach City College
B.A., M.A., University of California, Los Angeles

Professor
Electronics
A.A., Cerritos College
B.S., University of the State of New York

LEON, RUBEN JR. (1990)
Assistant Professor
Mathematics
B.A., M.A., California State University, Long Beach

Assistant Professor
Biology
B.A., M.A., California State University, Fullerton

LOPEZ DE GAINEs, CHRISTINA (1976)
Professor/Counselor
B.A., California State University, Long Beach
M.S., California State University, Fullerton

LOPEZ, CHRISTINE S. (1992)
Associate Professor
Piano/Choral
B.M., M.M., D.M.A., University of Arizona

LOPEZ, THERESA (2000)
Assistant Dean, Career Services
B.S., M.S., California State University, Los Angeles

LOU, ZHENG (2000)
Professor
Computer and Information Sciences
B.E., University of Shanghai for Sciences & Technology
M.S., University of Massachusetts, Amherst

MADDEN, JOHN D. (1998)
Professor
Philosophy
M. Phil., Ph.D., Yale University

MARIANI, ILVA (2000)
Instructor
Mathematics
M.S., California State University, Long Beach

MARINE, REBECCA A. (1994)
Professor
Child Development
B.A., Tufts University
M.A., California State University, Los Angeles

Instructor
Medical Assistant
B.S.N., Alverno College
M.S., California State University, Los Angeles

MARTINEZ, ERLINDA (1995)
Vice President of Student Services/Assistant Superintendent
B.A., University of California, Riverside
M.S., California State University, Long Beach

MATA, PILAR (2000)
Assistant Professor
Mathematics
B.A., M.A., California State University, Fullerton

MATSUURA, KENNETH (1990)
Professor/Counselor
B.A., University of California, Santa Barbara
M.A., Ph.D., University of California, Los Angeles

MAZZOTTA, FRANK (1976)
Professor
Physical Education/Athletics
B.A., University of Utah
M.A., Pepperdine University

MCFADDEN, WILLIAM (1982)
Professor
Mathematics/Computer Science
B.A., University of California, Los Angeles
B.S., University of California, Irvine
M.A., California State University, Long Beach

MCGINNIS, JOHN (1988)
Dean of the Library and Learning Resource Center
Associate Professor
B.A., M.A., Loyola University
M.L.S., University of Southern California

MCLARTY-SCHROEDER, JANET (1999)
Instructor
Astronomy
B.S., University of Iowa
M.S., University of Arizona

MCPHERSON, MICHAEL (1988)
Associate Professor
Health, Physical Education/Athletics
B.A., California State University, Northridge
M.A., Azusa Pacific University

MEDINA, CECILIA (1976)
Professor
B.A., Notre Dame College
M.A., California State University, Los Angeles

MEDINA-VALIN, NIURKA (1989)
Associate Professor
Spanish
B.A., M.A., California State University, Los Angeles
Ph.D., University of Southern California

MELLAS, DEAN (2000)
Instructor
Computer and Information Science
B.A., B.S., California State University, Fullerton

MILLER, ALICE (1985)
Instructor
Reading
B.A., Southern Illinois University
M.A., Arizona State University
MILLER, DONNA (1972)
Instructional Dean, Liberal Arts
B.A., California State University, Northridge
M.A., University of Southern California

MILLER, KIRK (1988)
Professor
Art and Design
A.B., University of California, Berkeley
B.F.A., M.F.A., Art Center College of Design

MITCHELL, VALENCIA (1989)
Professor
Librarian
B.A., Mills College
M.S., University of Southern California
M.A., California State University, Long Beach

MIXSON JR., FRANK L. (1998)
Assistant Professor
English
B.A., Drake University
M.A., California State University, Long Beach

MONTERA, FRANK J. (1972)
Associate Professor
Physical Education/Athletics and Mathematics
B.A., University of Colorado
M.Ed., Whittier College

Associate Professor
Mathematics
A.A., El Camino College
B.A., University of California, Los Angeles
M.A., Cornell University

MORIARTY, CYNTHIA (1992)
Assistant Professor
Office Technologies
A.A., Fullerton Junior College
B.S., California State University, Fullerton

MOSER, BERNICE (1988)
Professor
Nursing Education
B.S.N., George Mason University
M.S.N., California State University, Los Angeles

MOTRUK, NINA (2001)
Instructor
Cosmetology
A.A., Cerritos College
B.S., Southern Illinois University

MUELLER, BARBARA J. (1995)
Assistant Professor
English
B.A., Kansas State University
M.A., California State University, Long Beach

NAJARIAN, HAGOP (1999)
Instructor
Art and Design
B.A., California State University, Long Beach
M.A., Temple University

NAKAMURA, DIANE (1986)
Assistant Professor
English as a Second Language
B.A., Marymount Manhattan College, New York
M.A., Columbia University

NAKASON, HARRY H. (1973)
Professor
Disabled Student Programs and Services
B.A., M.S., California State University, Long Beach

NAMALA, SOLOMON (1999)
Instructor
Economics
B.A., Lewis & Clark College
Ph.D., University of Utah

NANCE, WESLEY (1979)
Professor
Business Computer Information Systems
B.A., M.A., California State University, Long Beach
M.A., University of California, Santa Barbara

NEGRETE, BERNARD J. (1981)
Professor
Business Computer Information Systems
B.A., California State University, Long Beach
M.S., National University

NELSON, DAVID W. (1986)
Professor
Music
B.A., M.A., Ph.D., University of California, Santa Barbara

NGUYEN, PAMELA (2000)
Instructor
Mathematics
B.S., M.S., California State University, Long Beach

NGUYEN, PHUONG D. (1991)
Instructor
Business Computer Information Systems
B.S., M.S., University of California, Davis

NIKDEL, MOJDEH (1997)
Instructor
Mathematics
B.S., M.A., Ph.D., Pennsylvania State University

NIKOMIYA, KATHLYN (1986)
Professor
Dental Hygiene
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

OBASOHAN, VICTOR (1992)
Instructor
Political Science
B.S., M.A., Jackson State University

O'NEIL, SCOTT (2000)
Instructor
Mathematics
B.S., University of California, Santa Barbara
M.S., California State University, Long Beach

PAGE, ELIZABETH (1999)
Instructional/Counselor (DSPS)
B.A., California State University, Dominguez Hills
M.A., California Polytechnic State University, San Luis Obispo

PAIGE, MATTHEW (1999)
Instructor
Reading
B.A., California Lutheran College
M.A., California State University, Long Beach

PAULINO, LINDA (1988)
Professor
English
B.A., Rutgers University
M.A., Ph.D., University of Southern California

PARSONS, SUSAN (1985)
Associate Professor
Mathematics
B.A., M.A., California State University, Long Beach

PATRICK, CAROL (1997)
Administrative Dean of Counseling
B.A., University of Michigan
M.A., M.S., San Diego State University

PEEBLES, RANDY (1985)
Instructional Dean, Technology
B.A., M.A., California State University, Long Beach
Ed.D., Pepperdine University

PERALTA, TRUDY A. (1990)
Professor
English
A.A., Long Beach City College
B.A., M.A., California State University, Long Beach

PERKINS, SHERRY L. (1979)
Professor
Court Reporting
A.A., Cerritos College
B.V.E., M.A., California State University, Long Beach
PIERINI, MICHAEL S. (1995)
Instructor
Culinary Arts/Baking
A.A., West Los Angeles College
B.V.E., California State University, Long Beach

PIORKOWSKI, MARIJEAN (1977)
Professor
Physical Therapist Assistant Program
A.A., Orange Coast College
B.S., M.S., University of California, Los Angeles

PIRTLE, DIANNE D. (1997)
Assistant Professor
Sociology
B.A., M.A., California State University, Dominguez Hills

PORTER, INGEBORG (1979)
Professor
German
B.A.M.A., California State University, Fullerton

PRATT, JOAN (1981)
Associate Professor
Nursing Education
B.S.N., Marquette University
M.S.N., California State University, Los Angeles

PRIBBLE, MARY (1984)
Professor
Paralegal
A.A., Citrus College
B.A., Whittier College
M.B.A., California State University, San Bernardino
J.D., Western State University

PRICE, TERRY L. (1975)
Professor
Plastics Technology
A.A., East Los Angeles College
B.A., California State University, Long Beach

PRINDLE, JEANINE V. (1977)
Professor
Health, Physical Education/Athletics
B.A., M.A., California State University, Long Beach
M.Ed., Azusa Pacific University

PRITCHARD, JR., GARY (1999)
Instructor
Music
B.A., Chapman University
M.A., Claremont Graduate School

QUAAS-BERRYMAN, FRANCIE (1999)
Instructor
English
B.A., M.A., California State University, Fullerton

REAL, YANNICK (2000)
Instructor
Machine Tool Technology
B.S., University of Metz
M.S., California State University, Long Beach

REECE, BRYAN S. (1991)
Associate Professor
Political Science
B.A., M.A., University of Southern California

RENTERIA, ROBERT A. (1975)
Professor
Reading
A.A., East Los Angeles College
B.A., M.A., California State University, Los Angeles
M.S., California State University, Fullerton

RIGBY, JEFFREY (1991)
Associate Professor
Anthropology
B.A., M.A., University of California, Los Angeles

ROBERTS, LYNDA (1989)
Professor
Childhood Development
A.A., Long Beach Community College
B.A., M.A., California State University, Long Beach

ROBERTSON, CHARLES C. (1994)
Assistant Professor
Automotive Collision Repair
A.A., Cerritos College
A.S., Long Beach City College
B.V.E., California State University, Long Beach

ROBINSON, ELLIS (1983)
Associate Professor
Culinary Arts
A.A., Los Angeles Trade Tech

RODRIGUEZ, PHILIP C. (1974)
Professor
Director of Student Affairs
A.A., Cerritos College
B.A., California State University, Fullerton
M.A., California State University, Dominguez Hills
Ed.D., University of Southern California

ROMERO, VIRGINIA (1980)
Professor/Athletics Counselor
B.A., California State University, Long Beach
M.A., Azusa Pacific University
M.S., California Lutheran College

ROUYE, JEFFREY (1988)
Professor
Architecture
B.S., M.A., University of Illinois
M.B.A., California State University, Fullerton
Ed.D., University of Southern California

RYZAK, EVELYN (1990)
Professor/Counselor (EOPS)
B.A., University of California, Los Angeles
M.A., California State University, Dominguez Hills

SALAZAR, PHILLIP (1981)
Professor
Counselor
B.A., California State University, Los Angeles
M.A., California State University, Long Beach
M.A., Whittier College

SAMPSON, LYNDA (1989)
Professor
Librarian
B.A., Scripps College
M.L.S., University of Southern California

SANDERSON, JANET (1986)
Professor
Physical Education/Dance
B.A., M.A., California State University, Los Angeles

SARELL, GARY (1985)
Professor
Mathematics
B.A., California State University, Fullerton
M.A., California State University, Long Beach

SCHAUMBURG, GARY (1970)
Professor
Psychology
A.A., Orange Coast College
B.A., California Western University
M.A., California State University, Long Beach
SCHMIDT, DEBRA L. (1990)
Associate Professor
Accounting
B.A., California State University, Fullerton

SCOTT, LACRETA (1984)
Associate Professor
English
Pepperdine University
M.A., California State University, Long Beach

SESTINI, SALLY (1986)
Professor
Mathematics
B.A., University of California, Los Angeles
M.S., California State University, Northridge

SEWELL, DONALD (1989)
Professor/Counselor
A.A., Orange Coast College
B.A., California State University, Long Beach
M.A., San Francisco State University
Ed.D., University of Southern California

SHARP, MAGEYA (1983)
Professor
Business Administrative Support Systems
B.A., California State University, Long Beach
M.S., Pepperdine University

SHEPHERD, KATHLEEN (1990)
Assistant Professor/Counselor
B.S., California State University, Dominguez Hills
M.A., Loyola Marymount University

SHIMAZU, CHERYL (1989)
Associate Professor
Chemistry
B.A., University of California, Irvine
M.S., California State University, Long Beach

SIMONEK, HAROLD R. (1963)
Professor
Physical Education/Athletics
B.S., M.A., California State Polytechnic University

SMITH, JEFFERY L. (1979)
Instructor
Physical Education/Athletics
B.S., Michigan State University
M.A., Azusa Pacific University

SMITH, RONALD L. (1992)
Instructor
Manufacturing Technology
B.S., California State University, Fresno

SODEN, BARBARA A. READ (1987)
Professor
Office Technologies
B.S., College Misericordia, Dallas, PA
M.S., Marywood College

SOTO, ARMANDO (1998)
Instructor/Counselor
B.A., University of California, Berkeley
M.A., San Diego State University

Instructor
Co-Director of Forensics/Speech Communication
B.A., M.A., University of Southern California

SPETRINO JR., ALBERT A. (1973)
Professor
Disabled Student Programs and Services
B.A., Coe College
M.A., University of Iowa

STAPP, LESLIE E. (1999)
Instructor
Philosophy
M.A., Ph.D., University of California, Davis

STEIN, GERALD (1992)
Associate Professor
Paralegal
B.A., California State University, Long Beach
J.D., Southwestern University School of Law

STEwart, PATRICIA J. (1972)
Professor
Dental Hygiene
A.A., Cerritos College
B.S., University of Southern California
M.A., California State University, Long Beach
Ph.D., University of Southern California

STILES, LYNN M. (1990)
Associate Professor
English
B.A., M.A., California State University, Long Beach

STUART, PEGGY J. (1995)
Assistant Professor
Nursing Education
B.S.N., California State University, Long Beach
M.S.N., California State University, Los Angeles

SUGIYAMA, CHRISTINE (1987)
Professor/Counselor
B.A., University of California, Los Angeles
M.A., California State University, Dominguez Hills

SWANSON, JOHN (1992)
Associate Professor
English
B.A., University of California, Berkeley
M.F.A., University of California, Irvine

SWIFT, ELIZABETH (1987)
Professor
Mathematics
B.A., M.A., California State University, Fullerton

Instructor
Welding
A.A., Cerritos College
B.V.E., California State University, Long Beach

TAYLOR, KEVIN (1992)
Instructor
Automotive Technology
B.A., M.A., California State University, Long Beach

TORRES-BOWER, ANA (1992)
Professor
Philosophy
B.A., University of Puerto Rico
M.A., California State University, Long Beach

TROUP, JACQUELYN A. (1991)
Instructor
Sociology
B.A., M.A., Pepperdine University

VALENZUELA, RAUL (1989)
Associate Professor/Counselor (EOPS)
B.A., University of California, Irvine
M.S., California State University, Fullerton

VAN DE MORTEL, JOSEPH (1988)
Associate Professor
Philosophy
B.A., California State University, Fullerton
M.A., University of San Francisco

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

WALKER, PAMELA (1996)
Instructional Dean, Physical Education/Athletics
B.S., Eastern Oregon State College
M.A., California State University, Sacramento
Ed.D., University of San Francisco

WALther, ROBERT S. (1992)
Professor
Microbiology
B.S., M.S., University of Southwestern Louisiana
M.A., University of California, Los Angeles
WATANABE, SUSAN (1991)
Associate Professor
Theatre Arts
B.A., California State University, Dominguez Hills
M.F.A, University of Southern California

WELL, GEORGIA (1983)
Associate Professor
Theatre Arts
A.A., Bakersfield Junior College
B.A., M.A., California State University, Long Beach

WELLIVER, KAREN M. (1988)
Assistant Professor
Health, Physical Education/Athletics
B.A., M.A., California State University, Long Beach

WELLS, DOUGLAS (1989)
Associate Professor
Physical Education/Athletics
B.S., M.S., University of Utah

WHITE, BRENDA J. (1993)
Instructor
Cosmetology
B.A., Union Institute

WHITSON, BEVERLY (1984)
Professor
English
A.A., Cerritos College
B.A., M.A., California State University, Fullerton

WILKOFF, HUGH (1962)
Professor
Business
B.A., M.A., Michigan State University
J.D., Pepperdine University

WILSON, CHRISTOPHER (2000)
Assistant Professor
Art and Design
B.A., University of California, Irvine
M.F.A, Loyola Marymount University

WILSON, JACK (1999)
Instructor
Computer and Information Sciences
B.A., M.S., California State University, Fullerton

WISSA, FARID (1988)
Professor
Drafting/Engineering
A.A., Cerritos College
B.V.E., M.A., California State University, Long Beach

WOODS, YVONNE (1991)
Professor
Early Childhood Education
B.A., Pepperdine University
M.A., Pacific Oaks College

WOOLEVER, JAMES D. (1966)
Professor
Business Computer Information Systems
A.A., Cerritos College
B.V.E., California State University, Long Beach
M.S., National University

WRIGHT, FRANK (1965)
Professor
Mathematics/Computer Science
B.S., Illinois State University
M.A., Rutgers University
Ed.D., University of Colorado

YEAGER, MARTHA (1982)
Associate Professor
English as a Second Language
B.A., State University of New York, Buffalo
M.A., Michigan State University

YEE, FRANKLIN (1976)
Professor
Ornamental Horticulture
A.A., Mt. San Antonio College
B.S., California Polytechnic State University, Pomona
M.A., California State University, Long Beach

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

YSAIS, REY (1965)
Professor
Mathematics
A.A., East Los Angeles College
B.A., University of California, Riverside
M.A., San Diego State University

ZEWAIL, MERVAT (1984)
Professor
Chemistry
B.S., University of Alexandria, Egypt
Ph.D., University of Pennsylvania

ZIVE, INA (1972)
Professor
Dental Hygiene
A.A.S., New York City Community College
B.A., M.A., California State University, Long Beach
Ed.D., Pepperdine University
<table>
<thead>
<tr>
<th>Name</th>
<th>Years</th>
<th>Department</th>
</tr>
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<tr>
<td>Adams, Keith</td>
<td>1970-1991</td>
<td>Dean of Vocational Education/Extended Day</td>
</tr>
<tr>
<td>Aguirre, Rudolph</td>
<td>1959-1987</td>
<td>Art</td>
</tr>
<tr>
<td>Allegre, Jean</td>
<td>1964-1991</td>
<td>French</td>
</tr>
<tr>
<td>Allen, Robert</td>
<td>1965-1991</td>
<td>Business-Accounting</td>
</tr>
<tr>
<td>Angle, Nancy</td>
<td>1989-1999</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Archer, Donny</td>
<td>1961-1981</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Baird, Margaret W.</td>
<td>1965-1983</td>
<td>Office Occupations</td>
</tr>
<tr>
<td>Baker, Everett D.</td>
<td>1959-1989</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Balch, Donald</td>
<td>1962-1979</td>
<td>English</td>
</tr>
<tr>
<td>Barker, Matilda</td>
<td>1989-2000</td>
<td>Sociology</td>
</tr>
<tr>
<td>Barley, Lois</td>
<td>1964-1979</td>
<td>Cosmetology</td>
</tr>
<tr>
<td>Baxter, Dorris</td>
<td>1957-1984</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Beam, Roger D.</td>
<td>1975-1993</td>
<td>Automotive Technology</td>
</tr>
<tr>
<td>Behrends, Sharon</td>
<td>1976-1996</td>
<td>Nursing Education</td>
</tr>
<tr>
<td>Bellugue, Roland</td>
<td>1991-2000</td>
<td>French</td>
</tr>
<tr>
<td>Beuligmann, Marie</td>
<td>1981-1999</td>
<td>Nursing Education</td>
</tr>
<tr>
<td>Beykirch, Helen M.</td>
<td>1984-1993</td>
<td>Counselor</td>
</tr>
<tr>
<td>Buffalini, Elviedo G.</td>
<td>1967-1986</td>
<td>Counselor</td>
</tr>
<tr>
<td>Burnight, Ralph F.</td>
<td>1956-1962</td>
<td>President/Superintendent</td>
</tr>
<tr>
<td>Cabeen, Charles</td>
<td>1958-1979</td>
<td>Psychology</td>
</tr>
<tr>
<td>Beuligmann, Marie</td>
<td>1981-1999</td>
<td>Nursing Education</td>
</tr>
<tr>
<td>Black, John G.</td>
<td>1959-1989</td>
<td>Accounting</td>
</tr>
<tr>
<td>Black, Rhea G.</td>
<td>1964-1999</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Blaszcak, Frank</td>
<td>1962-1988</td>
<td>Machine Tool/Plastics Technology</td>
</tr>
<tr>
<td>Bliss, Betty</td>
<td>1965-1983</td>
<td>Dental Assisting</td>
</tr>
<tr>
<td>Bluske, Margaret</td>
<td>1958-1979</td>
<td>German</td>
</tr>
<tr>
<td>Bock, Frank</td>
<td>1961-1988</td>
<td>Anthropology/Theatre</td>
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Electronics

HOFMUND, CLYDE  
(1957-1982)  
Drafting

HOLLAND, ROGER  
(1976-1992)  
Business Administration

HOLMAN, JEAN LEE  
(1962-1974)  
Cosmetology

HOLSTEGER, MARTIN  
(1962-1989)  
Mathematics

HUBBELL, SILVIA R.  
(1966-1999)  
Spanish

HUBRECHT, GLENN  
(1975-1991)  
Electronics

HUFFMAN, JOAN  
(1963-1991)  
Biology

HUMISTON, GENEVIEVE  
(1957-1960)  
Dean of Admissions

HUNTER, FREDERICK  
(1973-1988)  
Business Education

IKEMOTO, MILDRED  
(1967-1992)  
Instructional Dean/Health Occupations

INCORVAIA, JOSEPH  
(1958-1978)  
Business

JACKSON, JOHN  
(1957-1991)  
Automotive Technology

JANKOWSKI, SHIRLEY  
(1975-1990)  
College Nurse

JENKINS, SARAH  
(1959-1989)  
Librarian

JENNINGS, STANLEY  
(1957-1985)  
History

JEPPESSEN, JACK  
(1964-1982)  
Economics

JOHNSON, CARL  
(1958-1976)  
Librarian

JOHNSON, WILLIAM  
(1971-1991)  
Physical Education

JONES, BETTY LOU  
(1965-1989)  
Librarian

JONES, MARGIA  
(1974-1979)  
Business Education

JORDAN, ROBERT  
(1960-1989)  
Sociology

JULIANO, RICHARD  
(1965-1991)  
Instruction Dean, HPER/Athletics

KAMANSKI, PAUL DAVID  
(1959-1989)  
Physical Education

KELDER, JOHN  
(1965-1991)  
Business Computer Information Systems

KERR, JOSEPH P.  
(1963-1966)  
Data Processing

KETELLE, WILLIAM  
(1975-1992)  
Furniture Manufacturing Technology

KINCAID, WALLACE  
(1957-1989)  
Physical Education

KLEIN, WERNER  
(1960-1976)  
Dental Assisting

KLEINERMAN, JOSEPH  
(1957-1987)  
Counselor

KORF, LEE  
(1958-1982)  
Theatre Arts

KORSMEIER, HENRY F.  
(1956-1969)  
Assistant Superintendent, Business

LACKMAN, JACK  
(1965-1984)  
English

LA GUARDIA, PATRICIA  
(1973-1998)  
Director, Assessment Center

LAHRS, WILLIAM E.  
(1965-1983)  
Office Occupations

LAIDLAW, RUTH F.  
(1964-1986)  
Home Economics

LANE, WILMA C.  
(1973-1989)  
Cosmetology

LANG, JEAN H.  
(1972-1989)  
Nursing

LANGDON, DEARESTEEEN  
(1968-1991)  
Special Education

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

LUCAS, STANLEY  
(1976-1991)  
Automotive Technology

LUNDGREN, AUSTIN  
(1965-1989)  
Accounting

MAGNUSON, WALTER C.  
(1973-1993)  
Vice President of Business Services

MAKI, ROY E.  
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Business
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English/Law

ROBERTS, CECIL  
(1971-1979)  
Librarian

ROBERTS, EDITH  
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Physical Education

ROBINSON, RICHARD B.  
(1965-1986)  
Associate Dean, Student Activities

RODRIGUEZ, ANTONIO  
(1968-1989)  
Speech Communication

ROSIER, RUDOLF  
(1975-1992)  
Baking

SAFERITE, ELWYN  
(1957-1981)  
General Business and Accounting

SANSON, DORIS  
(1961-1979)  
Division Chairman, Health Occupations

SAUCEDO, MARCELO  
(1972-1993)  
Counselor

SCHUTZ, JOAN  
(1957-1979)  
Division Chairman, Health, P.E. and Recreation

SCOTT, DICK  
(1957-1980)  
History

SCOTT, OLIVE P.  
(1959-1986)  
Vice President for Instructional Services

SEELEY, GEORGE  
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Physics

SHARPE, DOLLIE  
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Cosmetology

SHAW, FRANK  
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Administration of Justice

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Industrial Supervision

SHOPFNER, JERRY  
Autobody

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Physics

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Art

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English

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History

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Dean of Instructional Support

SMITH, RALPH  
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Technology

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Dental Assisting

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Automotive Technology

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Accounting/General Business

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Chemistry/Energy

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History

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Data Processing

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Electronics

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Speech Communication

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History

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Philosophy/English

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Librarian

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Instructional Dean, Fine Arts and Communications

TOLLEFSON, GLENN  
(1965-1991)  
Numerical Control

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(1956-1977)  
Geology

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History/Political Science

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Office Technologies

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Business Education

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Speech Communication

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ACADEMIC AFFAIRS
MASOUD ALAVIAN
MARIA BOYOL
JOHN GALLANT
MONICA GONZALEZ
ROBERT HO
DOROTHY O’DONNELL
LINDA STRANGE
PAM ELA TAUSON
MIRIAM TOLSON
FRED A. WINFREY

ADMISSIONS AND RECORDS
ROSE ALEGRE
PAUL BADZEY
A.A., Cerritos College
DELFINA BERNABE
CHRISTINA CAMPBELL
A.A., Cerritos College
SUE BOSS
A.A., Cerritos College
JOAN CARY
SUSAN DEUTSCHMAN
JOEY EAR
A.A., Long Beach City College
LETICIA FEHN
BARBARA LADMRUAULT
NATASHA MEJIA
KATHLEEN OTERO
BENJAMIN PENDLETON
TRENAIN RICHARDSON-BLAND
LEAH STILLWAGON
THERESA TORRES
LISHA VALLES

ADULT EDUCATION/DIVERSITY PROGRAMS
VICKY KOSHE

AUTOMOTIVE
TROY CAGLE
JUSTUS ROESE
LAVERNE MELHORN

BUSINESS EDUCATION
PATRICIA CLEVELAND
MICKI ENGLAND
JOHNNY COOPER

BUSINESS SERVICES
LINDA KAUFMAN

CAMPUS POLICE
RANDY ALBANO
DAVID BARR
A.A., Fullerton College
JAI RIZNINO BARRON
TOM BRUSH
RICHARD BU KOWIECKI
RICARDO BUSTAMANTE
ANGEL CASTILLO
AMADOR CHAIDEZ
MARIO CHAVEZ
ALEJANDRO CHETTO
JOHN ECHEVARRIA
ESTER GAMEZ
CARY JAMISON
DEBRA KOMADINA
CHARLOTTE O’ROURKE
RENA TO REYES
SANTIAGO RIOS JR.
LAWRENCE SANDERS
CARLO VELAZQUEZ
CYNTHIA WARE

CAREER SERVICES
REGINA ALVAREZ
RENEE BLOCH
DORA LOZANO
MARIA LUISA MOTA
JIMMIE REED
MARINA RODRIGUEZ
CHRISTINA THE
ROSARIO VA SQUEZ

CHILD DEVELOPMENT CENTER
KELLY BARNETT
JUDITH DOODGE
MARIA WATSON

COMMUNICATION CENTER
CARMEN GARCIA

COMMUNITY, INDUSTRY & TECHNOLOGY EDUCATION
BARBARA DOUGLAS
VERONICA ELIAS
CHRISTINE GOMEZ
TONI GRIGIALVA
SUZANNE HEAPY
KATHY HOGUE
GAYLE KLINE
A.A., Cerritos College
CINDY LO
DARYABETH MARTINEZ
MONICA MASNO
NORBETO NUNEZ
CARON PACE
ROBIN PREECE
JENNIFER ZARAGOZA

COMPUTER SERVICES
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Dr. Jane M. Harmon
President/Superintendent

Dr. Steven Helfgot
Vice President of Public Affairs

Dr. Adolph Johnson, Jr.
Dean of Academic Affairs

Mr. Chi-Chung Keung
Director of Marketing and Public Relations

Ms. Maria Boyol
Catalog Coordinator

Mrs. Margo Winners
Designer

Mr. Kelly Kwan
Designer

Mr. Gilbert M. Rodriguez
Technical Advisor

Mr. Philip Channing
Photographer
Cerritos College Alcohol and Drug Policy

CERRITOS COLLEGE’S POLICY
It is the policy of Cerritos College to implement and maintain the provisions of the Drug-Free Schools and Communities Act amendments of 1989. The college’s policy clearly prohibits the unlawful possession, use, or distribution of illicit drug or alcohol by students and employees on campus or as part of any of its activities.

INFORMATION REGARDING LEGAL SANCTIONS UNDER FEDERAL, STATE, AND LOCAL LAWS IS AVAILABLE IN THE FOLLOWING LOCATIONS:
1. Library
2. Personnel Office
3. Student Activities Office
4. Assessment Center
5. Health and Wellness Office

ALCOHOL/DRUG ABUSE COUNSELING, TREATMENT, REHABILITATION INFORMATION:
Referral information and Social Service Directories for Los Angeles and Orange Counties are available in the following locations:
1. Counseling Center, ext. 2231
2. Student Health and Wellness Center, ext. 2321
3. Adult Reentry, ext. 2362

HEALTH RISKS
WHAT CAN HAPPEN TO YOUR BODY

<table>
<thead>
<tr>
<th>DRUG</th>
<th>Initial Use</th>
<th>Chronic Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALCOHOL</td>
<td>• Heart beats faster and weaker</td>
<td>• Permanent liver, heart, brain damage</td>
</tr>
<tr>
<td></td>
<td>• Become clumsy and stagger</td>
<td>• Liver cancer</td>
</tr>
<tr>
<td></td>
<td>• Get confused and can’t concentrate</td>
<td>• Stomach ulcers</td>
</tr>
<tr>
<td></td>
<td>• Feel sick to your stomach, vomit</td>
<td>• High blood pressure</td>
</tr>
<tr>
<td></td>
<td>• Mood changes quickly to violence or depression</td>
<td>• Alcoholism</td>
</tr>
<tr>
<td>COCAINE/CRACK</td>
<td>• Heart beats faster/blood pressure rises</td>
<td>• Permanent lung damage</td>
</tr>
<tr>
<td></td>
<td>• Body temperature rises</td>
<td>• Holes and ulcers inside nose</td>
</tr>
<tr>
<td></td>
<td>• Breathe faster</td>
<td>• Personality changes/violent behavior</td>
</tr>
<tr>
<td></td>
<td>• Can’t sit still or sleep</td>
<td>• Fear of people and things (paranoia)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• See things that aren’t real (hallucinate)</td>
</tr>
<tr>
<td>MARIJUANA</td>
<td>• Feel calm, relaxed, sleepy</td>
<td>• Heart and lung damage</td>
</tr>
<tr>
<td></td>
<td>• Heart beats faster</td>
<td>• Lung cancer</td>
</tr>
<tr>
<td></td>
<td>• Reaction time slows down</td>
<td>• Can’t remember things</td>
</tr>
<tr>
<td></td>
<td>• Throat, mouth, and lips get dry</td>
<td>• Lower ability to fight off colds and flu</td>
</tr>
<tr>
<td></td>
<td>• Eyes get bloodshot, eyesight blurs</td>
<td>• Lower sperm count and movement</td>
</tr>
<tr>
<td></td>
<td>• Lose sense of time</td>
<td>• Dysmenorrhea</td>
</tr>
<tr>
<td>STEROIDS</td>
<td>• Heart beats faster/blood pressure rises</td>
<td>• Heart attacks</td>
</tr>
<tr>
<td></td>
<td>• Become more alert</td>
<td>• Liver cancer</td>
</tr>
<tr>
<td></td>
<td>• Feel dizzy and shaky</td>
<td>• Stop growing taller</td>
</tr>
<tr>
<td></td>
<td>• Can’t sit still or sleep</td>
<td>• Impotency</td>
</tr>
<tr>
<td></td>
<td>• Breath smells bad, mouth and lips dry out</td>
<td>• Dysmenorrhea</td>
</tr>
<tr>
<td>TOBACCO</td>
<td>• Heart beats faster/blood pressure rises</td>
<td>• Lung and heart damage</td>
</tr>
<tr>
<td></td>
<td>• Feel sick to your stomach</td>
<td>• Lung, mouth, and throat cancer</td>
</tr>
<tr>
<td></td>
<td>• Feel dizzy</td>
<td>• Stomach ulcers</td>
</tr>
<tr>
<td></td>
<td>• Feelings of tension/tiredness</td>
<td>• High blood pressure</td>
</tr>
<tr>
<td></td>
<td>• Breath smells bad, teeth stained</td>
<td>• Sense of taste and smell reduced</td>
</tr>
</tbody>
</table>