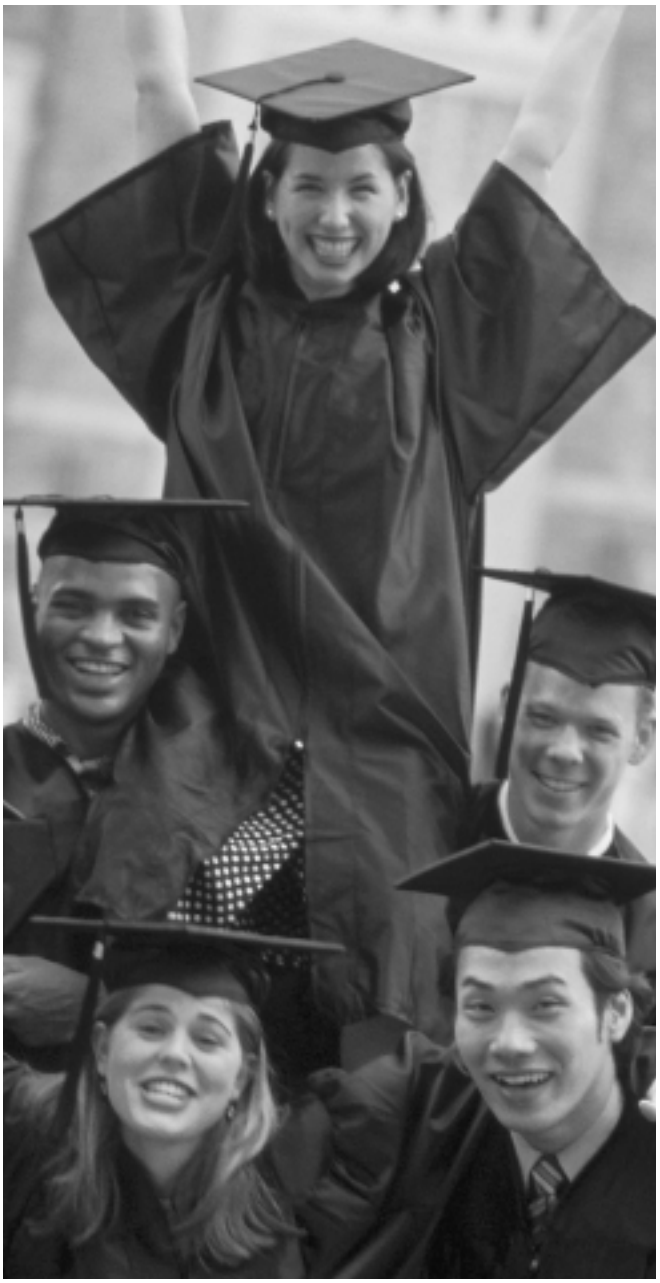

CERRITOS COLLEGE

GENERAL CATALOG

AND ANNOUNCEMENT

OF COURSES

ACADEMIC YEAR 2000-2001

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 surrounding areas.

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 College Trustees
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
Western Alliance of Arts Administrators

OPEN COURSES

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

All announcements herein are subject to revision. Changes may be made subsequent to the date of publication.

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2000-2001 ACADEMIC CALENDAR*

FALL SEMESTER 2000

Touchtone Registration . . . . . July 13-31, 2000
Late Registration . . . . . August 14-31, 2000
Instruction Begins . . . . . August 14, 2000
Final Examinations . . . . . December 8-14, 2000
Fall Semester Ends . . . . . December 14, 2000

SPRING SEMESTER 2001

Touchtone Registration . . . . . November 30-January 31, 2001
Late Registration . . . . . January 8-31, 2001
Instruction Begins . . . . . January 8, 2001
Final Examinations . . . . . May 11-17, 2001
Spring Semester Ends . . . . . May 17, 2001
Commencement . . . . . May 12, 2001

HOLIDAYS (THE COLLEGE WILL BE CLOSED)

Independence Day . . . . . July 4, 2000
Labor Day . . . . . September 2-4, 2000
Veterans Day Observance . . . . . November 10, 2000
Thanksgiving Holiday . . . . . November 23-25, 2000
Christmas Eve . . . . . December 22, 2000
Christmas Day . . . . . December 25, 2000
New Year's Eve . . . . . December 29, 2000
New Year's Day . . . . . January 1, 2001
Dr. Martin Luther King's Birthday Observance . . . . January 15, 2001
Lincoln's Birthday Observance . . . . . February 16, 2001
Washington's Birthday Observance . . . . . February 19, 2001
Good Friday . . . . . April 13, 2001
Memorial Day . . . . . May 28, 2001

RECESS

Semester Break . . . . . December 15, 2000-January 5, 2001
Spring Recess . . . . . April 9-14, 2001

**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

GENERAL OFFICES	EXT
President/Superintendent	2204
Academic Affairs	2218
Accounts Payable/Receivable	2261
Admissions and Records	2211
Bookstore	2462
Business Services (Information)	2241
Community, Industry, Technology Education	2482
Adult Ed/Diversity Programs	2491
Applied Technology Education Center (ATEC)	2511
Citizenship Education	5098
Community Education	2521
Economic Development	2497
Emeritus Education	2493
Community Relations	2285
Computer Services	2157
Counseling and Guidance	2231
Development	2191
Facilities	2300
Fiscal Services	2266
Information Technology and Development	2215
Instructional Media Services	2438
Insurance	2272
Library	2430
Payroll	2273/2274
Personnel Services	2284
Publications	2289
Public Relations	2285
Purchasing	2243
Research	2193
Student Services	2236

DIVISIONS	
Business Education	2715
Counseling	2231
Fine Arts/Communications	2600
Health Occupations	2550
HPER/Athletics	2859
Humanities/Social Sciences	2750
Liberal Arts	2858
Science/Engineering/Mathematics	2660
Technology	2900
Technology Training and Distance Education	2839

AREAS OF INTEREST	EXT
Academic Probation	2231
Administration of Justice	2776
Art Gallery	2612
Athletic Department	2864
Auto Collision and Repair	2939
Auto Maintenance/Repair	2930
Box Office (Burnight Center)	(562) 467-5058
Career Center	2359
Career Services Center	2356
Child Development Center	2583
College Activity Calendar (Civic Center)	2532
Communication Center/Mailroom	2200
Computer Assisted Instruction Lab (CAI)	2185
Cosmetology Department	2950

AREAS OF INTEREST	EXT
Disabled Student Programs, Director	2334
Central Intake (Information)	2333
Resource Center	2336
Instructional Support Center	2346
Speech, Language and Hearing	2351
Hi-Tech Micro-Computer Center	2349
Distance Education	2837
Drafting (CAD Lab)	2906
Drops and Adds	2211
Electronics	2916
EMERGENCY	3000
EOPS Office	2398
Fees or Refunds (Students)	2101/2259
Financial Aid	2397
Food Services/Culinary Arts	2456
Foundation	2526
Independent Study Center	2442
Innovation Center	2797
International Student Counselor/Advisor	2135
International Student Office	2133
Coordinator	2151
Job Information Hotline	(562) 467-5042
Job Placement (Students)	2366
Job Training (JTPA)	2400
Journalism	2617
Language Center/Language Lab	2854
Learning Assistance Program	2408
Lost and Found	2325
Machine Tool Technology (MTT)	2925
Math Learning Center	2659
Music Department	2629
Parking/Ride Share	2326
Photography Lab	2620
Physical Education Department	2859
Plastics and Composites (PMT)	2927
Police Department	2325
Radio Station, WPMD 1700AM	2626
Re-entry Resource Center	2362
Reading Center	2856
Scholars Honors Program	2771/2728
School Relations	2130
Speech Department	2844
Sports Information	2896
Staff Development	2735
Student Activities Office	
Clubs and Organizations	2473
Judicial Affairs	2471
Student Activities Center	2479
Student Body President	2477
Student Body Vice President	2478
Student Government	2475
Student I.D. Center	2480
Student Health and Wellness Center	2321
Talon Marks (Student Newspaper)	2618
Teleconference Center	2976
Theatre Arts Department	2638
Transfer Center	2154
Tutoring/Learning Assistance Program	2404
Veterans Affairs	2104
Weight Training Room	2885
Woodworking Manufacturing	2926
Writing Center	2855

BOARD OF TRUSTEES

President . . . . . Dr. Ted Edmiston
Vice President . . . . . Mrs. Cheryl Epple
Secretary . . . . . Mr. Bob Verderber
Member . . . . . Mr. Bob Arthur
Member . . . . . Ms. Dorothy Carfrae
Member . . . . . Mrs. Mary Loya
Member . . . . . Mr. John Moore
Student Member . . . . . Mr. Constantin Rosenbauer

ADMINISTRATION

Interim President/Superintendent . . . . . Dr. Morgan Lynn
Interim Vice President of Academic Affairs/
Provost . . . . . Ms. Donna Miller
Vice President of Business Services/
Assistant Superintendent . . . . . Mr. Peter Hardash
Vice President of Student Services/
Assistant Superintendent . . . . . Dr. Erlinda Martinez
Executive Dean of Community, Industry and
Technology Education . . . . .
Executive Dean of Information Technology and
Development . . . . . Mr. John Grindel
Dean of Academic Affairs . . . . . Dr. Adolph Johnson, Jr.
Dean of the Library and Learning
Resource Center . . . . . Mr. John J. McGinnis
Executive Director of School and
Community Relations . . . . . Dr. Steven Helfgot
Executive Director of Foundation . . . . . Mr. Steven Richardson
Administrative Dean of Technology Training/
Distance Education . . . . . Mr. M. L. Bettino
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 . . . . . Dr. Darryl Beale
Instructional Dean/Fine Arts/Communications . . . Dr. Barry Russell
Interim Instructional Dean/Liberal Arts . . . . Ms. Francine DeFrance
Instructional Dean/HPER/Athletics . . . . . Dr. Pamela Walker
Instructional Dean/Science, Engineering and
Mathematics . . . . . Mr. Norman Fujimoto
Instructional Dean/Technology . . . . . Dr. Randy Peebles

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

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

FISCAL SERVICES

Director of Fiscal Services . . . . . Mrs. Lola Rizkallah
Director of Purchasing . . . . . Ms. Donna Jones
Accounting Manager . . . . . Ms. Karen Rindfleisch
Budget Manager . . . . . Ms. JoAnne Sims
Payroll Manager . . . . . Ms. Sandra Holmes

PERSONNEL SERVICES

Interim Director of Personnel Services . . . . . Ms. Cynthia Convey
Assistant Director of Personnel Services . . . . . Mr. Dan O'Rourke

STUDENT SERVICES

Administrative Dean of Admissions and Records . . . . Mr. Peter Fong
Administrative Dean of Counseling . . . . . Mrs. Carol Patrick
Assistant Dean Career Services . . . . .
Chief of Campus Police . . . . . Mr. Marvin Engquist
Director of Communications . . . . . Mrs. Lilia Rodriguez
Director of Disabled Student Programs
and Services . . . . . Dr. Robert Hughlett
Director of Student Affairs . . . . . Dr. Phil Rodriguez
Director of Marketing/Public Relations . . . . . Mr. Chi-Chung Keung
Coordinator of Student 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. Irene Herrera
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 dollars.

Effective July 1, 1965, the District included the ABC Unified School District, the Bellflower Unified School District, the Downey Unified School District, and the Norwalk-La Mirada Unified School District. District population was 400,000 and the assessed valuation had jumped to more than $500,000,000. 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.

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.

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 areas 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 immediate access to the College's network. In addition, the College's Career Services and Job Placement Centers have been moved within a short distance of the "One Stop" Student Services Center making it the central hub of all Student Services and enrollment activities.

Also in the fall of 1998, the second phase of the 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 has distinguished itself as "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 was built in front of the College's music building.

Cerritos College takes pride in the quality of their outstanding faculty. In 1995, Economics Professor Dianne Keenan was selected as the "Community College Professor of the Year" by the National Carnegie Foundation for the Advancement of Teaching. 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's student population 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.

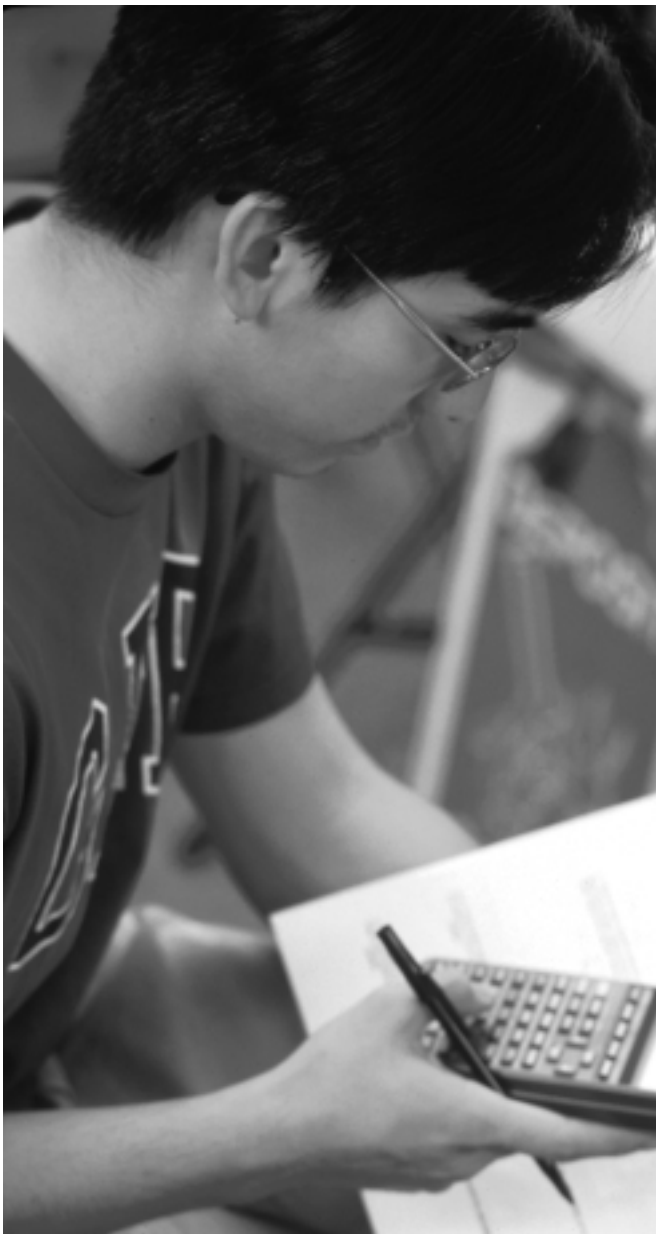
Mission

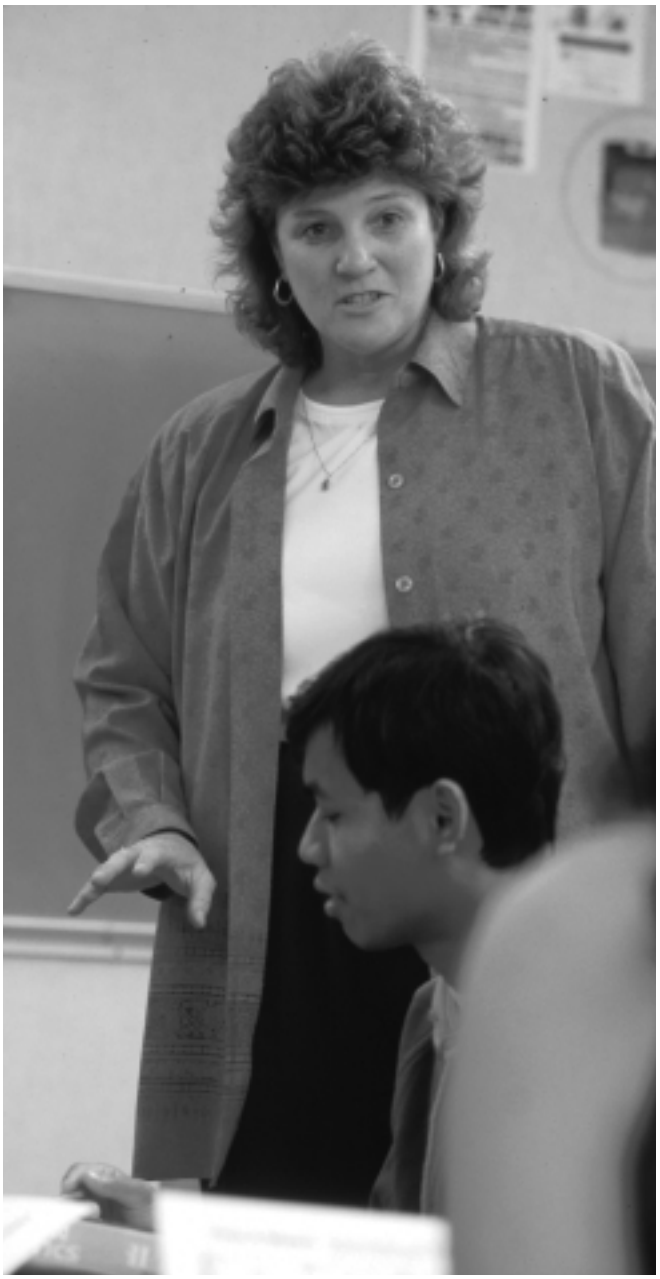
Cerritos College is an open access institution committed to providing high-quality, academically rigorous instruction in a comprehensive curriculum that respects the diversity represented in our student body and our region. We provide a technologically advanced educational community in which students 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 receive both high school and or college credit, but must also attend a minimum day at the high school. Enrollment in the summer session immediately prior to the junior year is also open to high school students. No enrollment fee 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 for more information.

Cerritos College also offers college credit courses on several local high school campuses. 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.

Students applying for admittance must meet the following criteria:

1. Enroll in 12 units or fewer, and;
2. 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;
3. Receive a written positive recommendation from a principal or counselor of the school of attendance;
4. Present a letter of parental consent to attend Cerritos College;
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.)
- T-B 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.)

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

• Application fee	$25.00
• Tuition and enrollment fee ($157.00 per unit)	4,710.00
• Books and supplies	700.00
• Student Health Fees	20.00
• College student ID Fee	20.00
• Health Insurance (mandatory)	540.00
• Living expenses (Approx.)	10,000.00
• Parking permit (optional if you have a vehicle)	40.00
Approx. total for the year:	$16,055.00
Approx. tuition fees per semester based on 12 units:	$1,884.00

For further information contact:

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

Expenses

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

STUDENT FEES

1. Enrollment fees for the community college student is $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 $131 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 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 and are determined as EOPS eligible students. Contact the Counseling Center for details. Outlined below are guidelines designed to help you complete the matriculation process.
- Failure to comply with matriculation regulations, declaring an educational goal and developing an educational plan may result in the termination of matriculation services to the student.

For additional information, visit the matriculation website at http://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 web site; 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
Holistic English 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 and mathematics 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 preprequisite, 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.

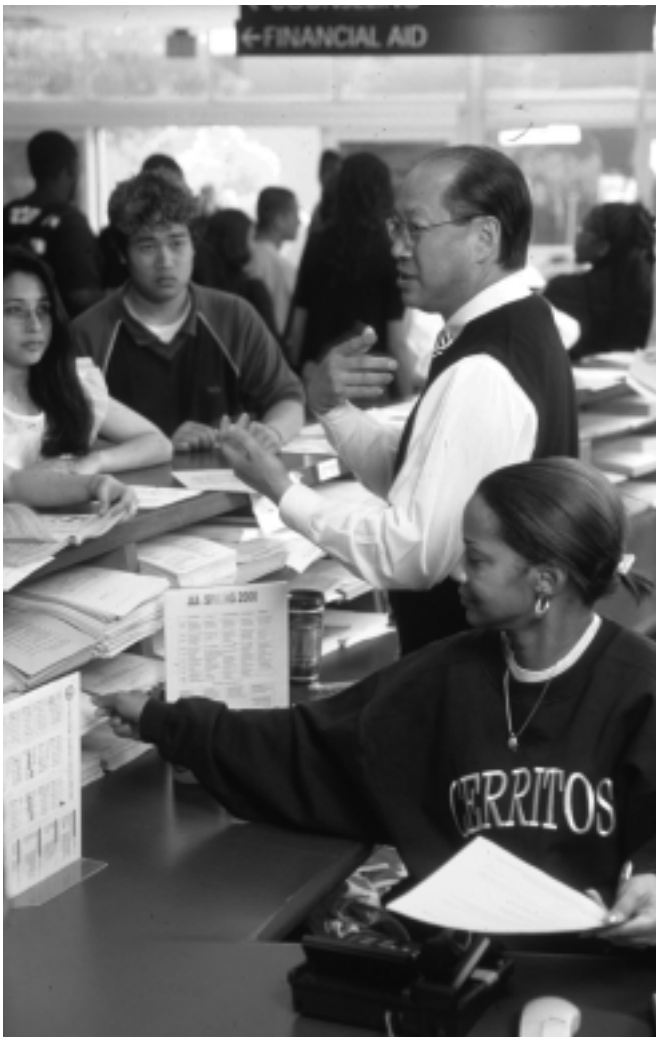
Students must bring transcripts from other colleges/universities or high schools with them to their counseling appointment to establish that prerequisites have been met elsewhere. The counselor will review the college/university catalog published the year the course was taken.

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 Business 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, Business 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; or
   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

c. The District has determined that a student should repeat a course because there has been a significant lapse of time since the student previously took the course. 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.

2. State apportionment for repetition 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:
   a. Skills or proficiencies are enhanced by supervised repetition and practice within class periods; or
   b. 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.*

COURSE	DESCRIPTION	UNITS	MAXIMUM UNITS
AB 1	Automotive Collision Damage Estimating	3.0	6.0
AB 2	Automotive Paint-Color Matching	3.0	9.0
AB 42	Collision Repair V	5.0	10.0
AB 45	Lettering, Striping & Design	2.0	4.0
AB 52	Collision Repair II	5.0	10.0
AB 53	Collision Repair III	5.0	10.0
AB 54	Collision Repair IV	5.0	10.0
AB 57	Advanced Automotive Welding	2.0	6.0
AB 61	Automotive Refinishing I	5.0	10.0
AB 62	Automotive Refinishing II	5.0	10.0
AB 63	Production Automotive Refinishing III	5.0	20.0
AB 70	Collision Repair Specialty-A	5.0	15.0
AB 71	Collision Repair Specialty-B	10.0	20.0
AB 72	Auto Body Management Specialty	3.0	12.0
AB 73/74	Auto Collision Rep Occ Work Experience	3-4	15-16
AB 80	Autobody Customer Service	2.0	8.0
AB 82	Collision Damage Estimating II	3.0	6.0
AB 83	Computer Estimating Specialty	1.5	6.0
AB 85	Collision Repair Management	3.0	6.0
AB 86	Collision Repair Production	2.0	8.0
AB 287	Advanced Collision Repair Management	2.0	8.0
AJ 173	Administration of Justice Occupational Work Experience	3.0	15.0
ANTH 251	Field Trips in Archaeology	3.0	6.0
ARCH 43/44	Arch Drawing Occ Work Experience	3-4	15-16
ART 50	Chinese Brush Painting	3.0	6.0
ART 104	Contemporary Art Practices	3.0	6.0
ART 113	Introduction to Illustration	3.0	6.0
ART 115L	Printmaking Lab	1.0	4.0
ART 130A	Fundamentals of Painting	3.0	6.0
ART 130B	Fundamentals of Painting	3.0	6.0
ART 136	Beginning Painting for Art Majors	3.0	6.0
ART 144	Jewelry/Metalsmithing	3.0	6.0
ART 145	Jewelry Casting & Molds	3.0	6.0
ART 150	Beginning Ceramics I	3.0	6.0
ART 151	Ceramics - Wheelthrowing	3.0	6.0
ART 152	Ceramics Handbuilding	3.0	6.0
ART 155	Beginning Ceramic Sculpture	3.0	6.0
ART 156L	Ceramics Lab	1.0	4.0
ART 163	Sculpture II	3.0	6.0
ART 170	Beginning Wood Sculpture I	2.0	4.0
ART 171	Beginning Wood Sculpture II	2.0	4.0
ART 180	Calligraphy I	3.0	6.0
ART 181	Calligraphy II	3.0	6.0
ART 186	Computer Graphics in Art and Design	3.0	6.0
ART 189L	Computer Graphics Lab	1.0	4.0
ART 192	Digital Imaging	3.0	6.0
ART 194	Multimedia Design	3.0	6.0
ART 197	Digital Painting	3.0	6.0
ART 213	Intermediate Life Drawing	3.0	6.0
ART 214	Special Studies in Life Drawing	3.0	6.0

ART 231	Intermediate Painting	3.0	6.0
ART 232	Portraiture: Drawing/Painting the Head	3.0	6.0
ART 237	Life Painting	3.0	6.0
ART 238	Spec Studies in Painting	3.0	6.0
ART 239	Portrait Painting	3.0	6.0
ART 246	Jewelry Design Fabrication	3.0	6.0
ART 248	Hollow Forming Jewelry Processes	3.0	6.0
ART 252	Forms and Techniques	3.0	6.0
ART 253	Intermediate Ceramics I	3.0	6.0
ART 255	Intermediate Ceramic Sculpture	3.0	6.0
ART 264	Sculpture III	3.0	9.0
ART 265	Sculpture IV	3.0	9.0
ART 270	Wood Lathe Art	2.0	4.0
ART 271	Carving Tool Making	2.0	4.0
ART 287A	Letter Arts I	2.0	4.0
ART 287B	Letter Arts II	2.0	6.0
AUTO 54	Introduction to Electric Vehicles	4.0	8.0
AUTO 55	Advanced Technology Electric Vehicles	4.0	8.0
AUTO 73/74	Auto Mech Rep Occ Work Experience	3-4	15-16
AUTO 120	Auto Lub Brakes & Wheel Align	5.0	10.0
AUTO 150	Automotive Machine Shop I	5.0	10.0
AUTO 160	Automotive Power Train	5.0	10.0
AUTO 170	Emission Control Systems-1993 Standards	5.0	10.0
AUTO 180	Automotive Air Conditioning	4.0	8.0
AUTO 224	High Performance Engines	5.0	10.0
AUTO 225	Advanced Automotive Machine Shop II	5.0	10.0
AUTO 226	Automotive Automatic Transmissions	5.0	10.0
AUTO 233	Electronic Fuel Management Systems	5.0	10.0
AUTO 243	Diagnostic Engine Performance	4.0	8.0
AUTO 245L	Automotive Specialty	2.0	6.0
BA 171	Business Administration Work Experience	1.0	3.0
BA 172	Business Administration Occ Work Experience	2.0	6.0
BA 173/174	Business Administration Occ Work Experience	3-4	15-16
BASS 135	Typing Speed/Control Building	1.0	3.0
BASS 173/174	Business Administrative Support Systems Work Experience	3-4	15-16
BCOM 152	Job Search in the Business Field	1.5	3.0
CIS 173/174	Bus. Computer Info. Systems Occ Work Experience	3-4	15-16
BIOL 100	Natural History of So. Calif.	1.0	2.0
BIOL 180L	Life Science Preparations	1.0	2.0
BIOL 250L	Special Topics in Biology	1.0	4.0
BL 171	Business Paralegal Occ Work Experience	1.0	3.0
BL 172	Business Paralegal Occ Work Experience	2.0	6.0
BL 173/174	Business Paralegal Occ Work Experience	3-4	15-16
BUSA 171	Business Accounting Occupational Work Experience	1.0	3.0
BUSA 172	Business Accounting Occupational Work Experience	2.0	6.0
BUSA 173/174	Business Accounting Occ Work Experience	3-4	16.0
BUSC 50	Computer-Aided Proofreading	2.0	4.0
BUSC 119A	Beginning Computer-Aided Transcription	2.0	4.0
BUSC 119B	Intermediate Computer-Aided Transcription	2.0	6.0
BUSC 119C	Advanced Computer-Aided Transcription	2.0	6.0
BUSC 119D	Basic Concepts of Realtime	2.0	6.0
BUSC 119E	Computer-Aided Medical Dictionary Build	2.0	6.0
BUSC 119F	Computer-Aided Legal Dictionary Build	2.0	6.0
BUSC 125	Computerized Shorthand Realtime Practicum I (100-130 wpm)	3.0	6.0
BUSC 126	Computerized Shorthand Realtime Practicum II (120-150 wpm)	3.0	9.0
BUSC 127	Computerized Shorthand Realtime Practicum III (140-170wpm)	3.0	9.0
BUSC 128	Computerized Shorthand Realtime Practicum IV (160-190wpm)	3.0	12.0
BUSC 129	Computerized Shorthand Realtime Practicum V (180-210 wpm)	3.0	12.0
BUSC 130	Computerized Shorthand Realtime Practicum VI (190-225wpm)	3.0	12.0
BUSC 139	Exploring Career Opportunities in Court Reporting	1.0	2.0
BUSC 141	Computerized Shorthand Theory Review/Skill Development	3.0	6.0
BUSC 142	Intermediate Computerized Shorthand	3.0	6.0
BUSC 143	Computerized Shorthand Speed Building I	3.0	6.0
BUSC 144	Computerized Shorthand Speed Building II	3.0	6.0
BUSC 145	Computerized Shorthand Speed Building III	3.0	9.0
BUSC 146	Computerized Shorthand Speed Building (140-170 wpm)	3.0	9.0
BUSC 147	Computerized Shorthand Speed Building (160-190 wpm)	3.0	12.0
BUSC 148	Computerized Shorthand Speed Building (180-210 wpm)	3.0	12.0
BUSC 149	Computerized Shorthand Speed Building (190-225 wpm)	3.0	12.0
BUSC 152	Introduction to Jury Charge Intermediate Computerized Shorthand	3.0	6.0
BUSC 153	Multiple-Voice Colloquy I Computerized Shorthand Speed Building I	3.0	6.0
BUSC 154	Introduction to Congressional Record Computerized Shorthand Speed Building II	3.0	6.0
BUSC 155	Multiple-Voice Colloquy II Computerized Shorthand Speed Building III	3.0	9.0
BUSC 156	Jury Voir Dire Procedures Computerized Shorthand Speed Development (140-170 wpm)	3.0	9.0
BUSC 157	Congressional Testimony Computerized Shorthand Speed Development (160-190 wpm)	3.0	9.0
BUSC 158	Professional Practices Hearings/ Conferences Computerized Shorthand Speed Development (180-210 wpm)	3.0	9.0
BUSC 159	In Curia/In Camera Procedures Computerized Shorthand Speed Development (190-225 wpm)	3.0	9.0
BUSC 173/174	Business Court Reporting/Computerized Shorthand Occupational Work Experience	3-4	15-16
BUSC 180	Computerized Shorthand Speed Building (225 wpm)	3.0	12.0
BUSC 185	CSR/RPR Examination Preparation	1.5	4.5
BUSC 190	Medical Transcription I/Court Reporting Method	3.0	6.0
BUSC 191	Medical Transcription II/Court Reporting Method	3.0	6.0
BUSC 192	Transcription Procedures	2.0	4.0
BUSC 193	Basic Captioning	4.5	9.0
BUSR 172	Business Real Estate Occupational Work Experience/Career Internship	2.0	6.0
BUSR 173/174	Business Real Estate Occ Work Experience/Career Internship	3-4	15-16
CA 43/44	Culinary Arts Occ Work Experience	3-4	6-8
CDEC 173/174	Early Childhood Education Occ Work Experience	3-4	6-8
CDIA 73/74	Inst Aide Occ Work Experience	3-4	6-8
CDIA 99	Instructional Aide Practicum	3.0	6.0

CDSE 73/74	Special Ed Asst Occ Work Experience	3-4	6-8
CG 2	Self Aware-Edu Readiness	2.0	4.0
CG 6	Family Living for the Disabled Student	1.0	4.0
CG 210	Job Search Strategies	1.0	2.0
CHEM 250L	Special Topics in Chemistry	1.0	2.0
CIS 5A	Business Computer Information Systems Word Processing	0.5	1.0
CIS 5B	Business Computer Information Systems Spreadsheet Module	0.5	1.0
CIS 5C	Business Computer Information Systems Database Module	0.5	1.0
CIS 171	Business Computer Information Systems Occ. Work Experience	1.0	3.0
CIS 172	Business Computer Information Systems Occ. Work Experience	2.0	6.0
CIS 174/174	Business Computer Information Systems Occ. Work Experience	3-4	15-16
COS 1	Cosmetology Salon Preparation	1.0	4.0
COS 53	Advanced Cosmetology Manipulation	9.0	18.0
COS 70C	Advanced Cosmetology Manipulation	8.0	16.0
COS 71C	Advanced Cosmetology Manipulation	4.0	8.0
DA 1	Dental Radiation Safety Licensing	1.5	3.0
DS 98	Directed Studies	1.0	2.0
DS 99	Directed Studies	2.0	4.0
DS 298	Directed Studies	1.0	2.0
DS 299	Directed Studies	2.0	4.0
EDT 1	Windows for Educators	1.0	4.0
EDT 2	Macintosh for Educators	1.0	4.0
EDT 6	E-Mail for Educators	1.0	4.0
EDT 7	Word for Educators I	1.0	4.0
EDT 8	Word for Educators II	1.0	4.0
EDT 9	Powerpoint for Educators I	1.0	4.0
EDT 10	Powerpoint for Educators II	1.0	4.0
EDT 11	Excel Spreadsheets for Educators	1.0	4.0
EDT 12	Access for Educators	1.0	4.0
EDT 14	Web Design for Educators	1.0	4.0
EDT 15	Education Hardware/Software Evaluation	1.0	4.0
EDT 16	Fundamentals of Online Courses	1.0	4.0
EDT 17	Computer Integration in Educators	1.0	4.0
EDT 18	Desktop Publishing for Educators	1.0	4.0
EDT 19	Fundamentals of Teleconferencing	1.0	4.0
EDT 20	Teleconferencing for Small Groups	2.0	4.0
EDT 21	Teleconference Telematics	1.0	4.0
EDT 22	Teleconference Review and Evaluation	1.0	4.0
EDT 43	Educational Occupation/Work Experience	3.0	6.0
EL 37L	Service and Repair Lab	2.0	4.0
EL 43/44	Electronics Occ Work Experience	3-4	15-16
EL 50	Electronic Tests and Measurements	1.5	3.0
EL 53A	Introduction to Microprocessors	3.0	6.0
EL 53B	Advanced Microprocessors	2.0	6.0
EL 60	Computer Aided Circuit Analysis	1.5	3.0
EL 114L	Fundamentals of Digital Electronics Lab	1.0	2.0
ENGL 227	Current Literature	3.0	6.0
ENGL 240	Creative Writing	3.0	6.0
ENGL 241	Scriptwriting for TV	3.0	6.0
ESCI 180	Earth Science Materials/Preparation	1.0	2.0
ESL 12	ESL Pronunciation	1.5	3.0
ESL 14	Accent Reduction	3.0	6.0
ESL 22	ESL Oral Communication	1.5	3.0
ESL 23	ESL Spelling	1.5	3.0
ESL 33	English for Specific Purposes	1.5	3.0
ESL 35	Editing for Advanced Grammar and Syntax	1.5	6.0
GEOL 100	Natural History of So. Calif.	1.0	2.0
HO 9	Emergency Medical Technician I	3.0	6.0
HO 9L	Emergency Medical Technician I Lab	2.0	4.0
HO 56	Medication Calculations for Nurses	1.0	2.0
JOUR 50L	Editorial Board	1.0	3.0
JOUR 103	Newspaper Article Writing	2.0	8.0
JOUR 104	Summer Newspaper Article Writing	1.0	3.0
JOUR 105	Newspaper Production	2.0	8.0
JOUR 106	Summer Newspaper Production	1.0	3.0
JOUR 120	Internet for Journalists	2.0	8.0
JOUR 160L	College Magazine Production	1.0	8.0
JOUR 170	Broadcast News	1.0	4.0
MA 73/74	Medical Assisting Occ Work Experience	3-4	6-8
MET 52L	Metallurgy Specialty Lab	0.5	2.0
MET 73/74	Metallurgy Occ Work Experience	3-4	15-16
MFGT 43/44	Manufacturing Tech Occ Work Experience	3-4	15-16
MTT1L	Numerical Control Specialty	1.0	4.0
MUS 1L	Music Laboratory	0.0	
MUS 112	Elementary Piano I	2.5	.5.0
MUS 113	Elementary Piano II	2.5	5.0
MUS 114	Intermediate Piano I	2.5	5.0
MUS 115	Intermediate Piano II	2.5	5.0
MUS 116	Voice I	2.5	5.0
MUS 117	Voice II	2.5	5.0
MUS 118	Voice III	2.5	5.0
MUS 119	Voice IV	2.5	5.0
MUS 120	Elementary Guitar I	2.5	5.0
MUS 121	Elementary Guitar II	2.5	5.0
MUS 122	Intermediate Guitar I	2.5	5.0
MUS 123	Intermediate Guitar II	2.5	5.0
MUS 124	Concert Band	2.5	10.0
MUS 125	Community Symphonic Band	2.5	10.0
MUS 126	Pep Band	2.5	10.0
MUS 127	Orchestra	2.5	10.0
MUS 128	Community Orchestra	1.0	4.0
MUS 129	Woodwind Ensemble	1.5	6.0
MUS 130	Brass Ensemble	1.5	6.0
MUS 131	Percussion Ensemble	1.5	6.0
MUS 132	Guitar Ensemble	2.5	10.0
MUS 133	Stage Band	2.5	10.0
MUS 134	Jazz Ensemble	2.5	10.0
MUS 136	String Ensemble	1.5	6.0
MUS 138	Community Chorus	2.5	10.0
MUS 139	College Chorus	2.5	10.0
MUS 140	Pop Choir	2.5	10.0
MUS 141	Pop/Rock Ensemble	2.5	10.0
MUS 142	Jazz Improvisation	1.0	4.0
MUS 143	The Jazz and Popular Singer	3.0	12.0
MUS 144	Electronic Synthesizer I	2.0	4.0
MUS 145	Electronic Synthesizer II	1.0	2.0
MUS 146	Recording Techniques	2.0	8.0
MUS 147	Basic Applied Music	1.0	2.0
MUS 148	Private Study/Recital I	1.0	2.0
MUS 149	Private Study/Recital II	1.0	2.0
MUS 150	Private Study/Recital III	1.0	2.0
MUS 151	Private Study/Recital IV	1.0	2.0
ORNH 2	Bonsai	1.0	2.0
ORNH 3	Advanced Bonsai	1.0	2.0
ORNH 4A	Advanced Special Occasions Floral Design III	2.0	4.0
ORNH 4B	Advanced Special Occasions Floral Design IV	2.0	4.0
ORNH 60	Advanced Floral Design	2.0	4.0
ORNH 61A	Special Occasions Floral Design I	2.0	4.0
ORNH 61B	Special Occasions Floral Design II	2.0	4.0
ORNH 62A	Wedding Floral Design	2.0	4.0
ORNH 62B	Wedding Floral Design I	2.0	4.0
ORNH 62C	Wedding Floral Design II	2.0	4.0
ORNH 63	Integrated Floral Design	1.0	2.0
ORNH 64	Floral Design for Funerals	1.0	2.0
PHOT 220	Advanced Color Photography	3.0	6.0
PHOT 232	Studio Problems in Photography	3.0	6.0

PHOT 252	Photography of the Natural Environment	3.0	6.0
PE 120	Sedentary Activities for the Disabled	1.0	4.0
PE 121	Aerobic Activities for the Disabled	1.0	4.0
PE 122	Circuit Weight Training for the Disabled	1.0	4.0
PE 123	Swimming for the Disabled	1.0	4.0
PE 124	Wheelchair Activities	1.0	4.0
PE 125	Water Safety Instructor (WS)	2.0	8.0
PE 130	Stretching and Relaxation	1.0	2.0
PE 131	Walking for Fitness	1.0	2.0
PE 132A	Aerobics Activities (Low Impact)	2.0	4.0
PE 132B	Aerobics Activities II	2.0	4.0
PE 133	Step Aerobics	2.0	4.0
PE 134	Water Aerobics	1.0	2.0
PE 135A	Circuit Weight Training Beginning	1.0	2.0
PE 135B	Circuit Weight Training Intermediate/ Advanced	2.0	4.0
PE 137	Song Unit	2.0	8.0
PE 138	Yoga	1.0	4.0
PE 140	Fitness Academy	2.0	4.0
PE 141	Fitness Academy	3.0	6.0
PE 142	Fitness Academy for Older Adults	2.0	4.0
PE 143	Personal Fitness Program	1.0	2.0
PE 150A	Swimming, Beginning	1.0	2.0
PE 150B	Swimming, Intermediate/Advanced	2.0	4.0
PE 151	Wrestling, Beginning	1.0	4.0
PE 152	Tumbling and Stunts, Beginning	1.0	4.0
PE 153A	Backpacking, Beginning	2.0	4.0
PE 153B	Backpacking, Advanced	2.0	4.0
PE 154A	Badminton, Beginning	1.0	2.0
PE 154B	Badminton, Intermediate/Advanced	2.0	4.0
PE 155A	Bowling Beginning	1.0	2.0
PE 155B	Bowling Intermediate/Advanced	1.0	4.0
PE 156A	Golf, Beginning	1.0	2.0
PE 156B	Golf, Intermediate/Advanced	2.0	4.0
PE 156C	Golf: Advanced Stroke Development and Course Play	2.0	4.0
PE 157	Handball, Beginning	1.0	4.0
PE 158A	Racquetball, Beginning	1.0	2.0
PE 158B	Racquetball, Intermediate/Advanced	2.0	4.0
PE 159A	Tennis, Beginning	1.0	2.0
PE 159B	Tennis, Intermediate/Advanced	2.0	4.0
PE 160	Self Defense for Women	1.0	4.0
PE 170	Water Polo	2.0	8.0
PE 171A	Softball	1.0	2.0
PE 171B	Softball, Intermediate/Advanced	2.0	4.0
PE 171C	Slow Pitch Softball	1.0	2.0
PE 172A	Volleyball, Beginning	1.0	2.0
PE 172B	Volleyball, Intermediate/Advanced	2.0	4.0
PE 175A	Baseball, Beginning	1.0	2.0
PE 175B	Baseball, Intermediate/Advanced	2.0	4.0
PE 176A	Basketball	1.0	2.0
PE 176B	Basketball, Advanced	2.0	4.0
PE 177	Flag Football for Women & Men	1.0	4.0
PE 178	Football, Intermediate/Advanced	2.0	8.0
PE 179A	Soccer, Beginning	1.0	2.0
PE 179B	Soccer, Intermediate/Advanced	2.0	4.0
PE 180	Introduction to Dance Movement	3.0	12.0
PE 181	Introduction to Dance Cultures of the World	2.0	8.0
PE 182A	Dance, Modern, Beginning	2.0	8.0
PE 182B	Dance, Modern, Intermediate	2.0	8.0
PE 183	Dance Production	2.0	8.0
PE 184	Choreography	2.0	4.0
PE 185	Partnering for Dance	2.0	4.0
PE 186A	Beginning Ballet	2.0	8.0
PE 186B	Intermediate Ballet	2.0	8.0
PE 187	Dance Repertory	2.0	8.0
PE 188	Dance Performance	2.0	8.0
PE 189	Dance Workshop	2.0	8.0
PE 200	Baseball	3.0	12.0
PE 201	Baseball Off-Season Conditioning	2.0	8.0
PE 202	Basketball, Men	3.0	12.0
PE 204	Basketball, Women	3.0	12.0
PE 206	Cross Country, Men	3.0	12.0
PE 207	Cross Country Conditioning	1.0	4.0
PE 208	Cross Country, Women	3.0	12.0
PE 210	Football, Men	3.0	12.0
PE 211	Football Conditioning (Olympic Weights - Power Lifting)	2.0	8.0
PE 212	Football Training and Techniques	2.0	4.0
PE 213	Intercollegiate Golf	3.0	12.0
PE 217	Soccer, Men	3.0	12.0
PE 219	Soccer, Women	3.0	12.0
PE 221	Softball, Women	3.0	12.0
PE 222	Softball Pre-Season Conditioning	1.0	4.0
PE 223	Swimming	3.0	12.0
PE 225	Swimming, Women	3.0	12.0
PE 227	Tennis, Men	3.0	12.0
PE 228	Tennis Conditioning	1.0	4.0
PE 229	Tennis, Women	3.0	12.0
PE 231	Track & Field, Men	3.0	12.0
PE 233	Track & Field, Women	3.0	12.0
PE 234	Track & Field Conditioning	1.0	4.0
PE 235	Volleyball, Women	3.0	12.0
PE 236	Volleyball Pre-Season Conditioning	1.0	4.0
PE 239	Water Polo -Men	3.0	12.0
PE 241	Water Polo - Women	3.0	12.0
PE 243	Wrestling	3.0	12.0
PE 245	Pep Unit	2.0	8.0
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
SL 50	Beginning Sign Language	2.0	4.0
SL 51	Intermediate 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 130A	Rehearsal & Performance I	1.0	4.0
TH 130B	Rehearsal & Performance II	2.0	8.0
TH 130C	Rehearsal & Performance III	3.0	12.0
TH 131A	Technical Production I	1.0	4.0
TH 131B	Theatre Production II	2.0	8.0
TH 135	Showcase	1.0	4.0
TH 136	Community Theatre Production	2.0	8.0
TH 140	Theatre Dance-Beg Jazz Freestyle	2.0	4.0
TH 141	Theatre Dance-Interm Jazz Freestyle	2.0	4.0
TH 142	Theatre Dance-Beginning Tap	2.0	4.0
TH 143	Theatre Dance-Intermediate Tap	2.0	4.0

TH 144	Musical Theatre Workshop	3.0	6.0
TH 145	Costume Production for Dance	1.0	4.0
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 258	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	Advanced Arc Welding	2.0	6.0
WELD 240	Advanced Tungsten Arc Welding Lab	2.0	4.0
WELD 250L	Gas Tungsten Arc Welding Specialty Lab	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
WMT 111L	Introduction to Woodworking Lab	1.0	4.0
WMT 118	Wood Turning	2.0	4.0
WMT 132	Chair Design and Construction	4.0	8.0
WMT 134	Frame Making	4.0	8.0
WMT 137	Outdoor Furniture	2.5	10.0
WMT 148	Furniture Making and Manufacturing	4.0	8.0
WMT 155	Architectural Millwork	4.0	8.0
WMT 171	Introduction to Wooden Boat Building	3.0	6.0
WMT 181	Introduction to Computer Operations for Cabinetmaking and Design	2.5	5.0
WMT 201	Woodworking with Hand Tools	4.0	8.0
WMT 202	Advance Machine Wood Tech	4.0	8.0
WMT 211	The Workbench Class	4.0	8.0
WMT 228L	Production Furniture Making and Manufacturing	2.0	8.0
WMT 229L	Comprehensive Woodworking Manufacturing Specialty	2.5	12.5
WMT 233	Morris Chair	4.0	12.0
WMT 248	Production Furniture Making and Manufacturing	4.0	12.0
WMT 249L	Furniture Manufacturing Specialty	2.5	10.0
WMT 251	Advanced Cabinetmaking	2.0	8.0
WMT 253	Advanced 32MM System of Cabinetmaking	3.0	9.0
WMT 268	Production Cabinetmaking and Manufacturing	5.0	15.0
WMT 269L	Cabinetmaking Manufacturing Specialty	2.5	10.0
WMT 281	Advanced Computer Operations for Cabinetmaking and Design	2.5	5.0

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 <÷> 18 ___ lecture units
Lab hours x number of weeks <÷> 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 either 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 Payroll/Fee Station 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. Disabled visitors are not required to purchase a parking permit if they display a DP plate or placard and park in "Blue Curb" zones. 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 white 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.

Bicycles and mopeds 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.

Moped parking

Mopeds will be parked in the appropriate racks located near C-2, C-7 and C-11. Mopeds must have valid California Motor Vehicle registration and driver must be licensed for this vehicle.

Parking on the Interior Campus

Bicycles and mopeds 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

Scholarship Regulations

FINAL EXAMINATIONS

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

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

GRADING

Accomplishment in course work is indicated by the following symbols:

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

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

GRADE CHANGES

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

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

INCOMPLETE

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

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 14th week of the semester (or 75% of a term, whichever is less). The academic record of a student who remains in a class beyond the date allowed for withdrawal must reflect a symbol 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 circumstance 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.
   f. The written verification of the reason or circumstances will be attached to the grade change request form when approved by the Instructional Dean for forwarding to the Admissions Office.

TRANSCRIPTS OF RECORD

A transcript of all college work completed may be obtained by any of the following methods:

1. To order transcripts over the phone, please call the following toll-free number, 1-888-775-2853, and follow the prompts.
2. To order transcripts by Internet, direct your browser to the following URL address (http://www.campusdirect.com), and select Cerritos College from the pulldown menu. Click on the "Transcripts" button and fill in the appropriate information.
3. To order transcripts through the mail, please send a check or money order made payable to: Transcript Express at Transcript Express, P.O. Box 202, Conshohocken, PA 19428.
4. To order transcripts via fax, call the toll-free 888 number first to find out what information to submit. Then fax your request with all student and destination information along with your credit card number and expiration date to the following fax number: 1-888-775-2854.
5. To order transcripts in person, apply at the Admissions and Records Office.

Failure by a student to pay proper financial obligation due to the college or district may result in the withholding of grades, transcripts, diplomas, or registration privileges or any combination thereof. (Education Code, section 72237).

Here is a list of some of the requirements you will need in order to place a transcript request in each of these cases.

- Your student ID or social security number
- Your full name.
- Your date of birth.
- Where to send the transcript (destination information).
- Your signature for mail-in or fax-in requests.
- Dates of attendance.
- A valid credit card and expiration date.

For a list of all the requirements please call the toll-free 800 number and listen to the fax/mail-in menu or option #2 at the beginning of the call.

VERIFICATION OF STUDENT STATUS FEES

The following are the fees for verification of enrollment:

$2.00 per verification of status.

$7.00 additional rush fee per verification to be completed within 48 hours.

Exemptions for these fees are for verification of enrollment and grade point average for the California Student Aid Commission for financial aid purposes.

GOOD STANDING

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

PROBATION

A. Academic Probation

Students who have 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," and "NC" are recorded reaches or exceeds 50 percent.

Probation is entered on the student's permanent records and transcripts of record. Students placed on academic or progress probation will be notified by mail 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 percentage of "W," "I," or "NC" entries to less than 50 percent of all units in which the students have enrolled.

STANDARDS FOR DISMISSAL

A. Academic Dismissal

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

B. Progress Dismissal

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

Students are notified they have been placed on probation shortly after the beginning of the 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 three weeks after the conclusion of the term.

CREDIT BY EXAMINATION

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

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

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

Students shall petition for "Credit by Examination" through a

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

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.

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:

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

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.*

ACADEMIC HONESTY / DISHONESTY POLICY

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

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

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

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

Academic Dishonesty is normally to be dealt with as an academic action by the instructor, reflected in the student's grade in the particular course, rather than through college disciplinary procedures. No specific departmental, divisional or institutional procedures are established for academic dishonesty other than the normal process for review and appeal of an instructor's grading procedures.

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

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

Student Services

ASSOCIATED STUDENTS

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

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

STATEMENT OF STUDENT RIGHTS AND RESPONSIBILITIES

PREAMBLE

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

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

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

CLASSROOM RIGHTS AND RESPONSIBILITIES

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

ON THE CAMPUS RIGHTS AND RESPONSIBILITIES

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

Student organizations shall be required to submit a statement of purpose, criteria for membership, rules of procedures, a current list of

officers and the advisor shall certify the list of verified members. Campus organizations should be open to all students.

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

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

IN THE LARGER COMMUNITY

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

STUDENT PUBLICATIONS

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

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

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

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

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

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.

STUDENT GRIEVANCE POLICY

In accordance with the Statement of Student Rights and Responsibilities, this policy will hereafter describe the procedures by which a student(s) of Cerritos College may air his or her grievances as applied to and regarding academic, administration, and instructional matters relating to students, and including, but not limited to, any grievance dealing with any certified 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 grievance is 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 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 a grievant shall call a meeting of the Student Grievance Hearing Committee. The Hearing Committee will be composed in the following manner:
   (a) ASCC Chief Court Justice and two (2) Court Justices or designees. Vice President of Academic Affairs or administra-

tive designee. Faculty Vice Chairman 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.

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, receive all available evidence to the charge.
6. The hearing shall be closed to the public unless otherwise agreed upon by mutual consent of both parties in writing.
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 grieved party 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 of this policy. A student may also submit a grievance after graduation if the grievance did not become known until that time.

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.

GROUNDS FOR DISCIPLINARY ACTION

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

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

DISCIPLINARY ACTIONS AND PROCEDURES

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

of the school term, or from all classes and activities of the community college for one or more terms.

3. There may be an immediate suspension when necessary to protect lives or property and to insure the maintenance of order pending a hearing within ten school days.

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

HEARING PROCEDURES

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

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

THE OFFICE OF JUDICIAL AFFAIRS

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

TITLE IX POLICY

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

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

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

EQUAL OPPORTUNITY POLICY

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

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

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

Students with a 2.0 G.P.A. and currently enrolled may join a club. 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 Students 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 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/dsps/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-clerical skills is available. The sessions are held four days per week throughout the year and may be entered at any time. The satellite campus at Rancho is designed for students who are 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 8:30 p.m., Monday through Thursday and from 9:00 a.m. to 4:00 p.m. on Friday.

If a student has special circumstances and cannot be available to obtain the identification card during any of the hours listed above, arrangements can be made by calling (562) 860-2451, ext. 2471.

COLLEGE BOOKSTORE

The Cerritos College Bookstore is leased and operated by Wallace's Bookstore, Inc., a private company dedicated to providing excellent customer service to the students, faculty, and staff at Cerritos College. The Bookstore strives to carry all of the required materials for course work, as well as supplemental, and reference materials. The Bookstore will have both new and used texts available, to help defray textbook costs for students. Additional reference and supplemental items can be special ordered by students and faculty at any time throughout the year. In addition, the bookstore stocks various gift items, sundries, and supplies.

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. Students can expect to receive the fair-market value of the text, which is sometimes as high as fifty percent, depending on several factors:

1. Whether the instructor has authorized using the same text again.
2. Whether the instructor has discontinued use of the text, or has not indicated whether it will be used again next term.
3. The textbook may have limited national demand.
4. There is a new edition pending; old editions have no, or little value.
5. The book is too shelf-worn and used to be resold.

BOOKSTORE REFUND POLICY

A corresponding, dated, cash-register receipt must accompany the return or exchange item in order for a refund or exchange to be authorized.

New Textbooks - may be returned for a refund within fifteen (15) calendar days of the start of classes each (18 week) term, provided books are unused, in new saleable condition, with no markings or any kind. For each short term (15-9-6 weeks) books must be returned during the first seven (7) calendar days.

Used Textbooks - may be returned for a refund within fifteen (15) calendar days of the start of classes each (18 week) term. For each short term classes (15-9-6 week) it is the first seven (7) calendar days.

Trade Books - may be refunded within five (5) calendar days of purchase if defective at the time of purchase.

Non-Book Merchandise - Supplies, clothing, computer software, cards, gifts and sundries may be returned within 24 hours provided merchandise: is not soiled, damaged or showing signs of use; was not purchased with a sales discount; was not imprinted for customer; and, is returned in original sales wrapper.

Special Orders - may not be returned for refund.

STORE HOURS

The bookstore is open from 7:30 a.m. to 7:00 p.m. Monday through Thursday, and from 7:30 a.m. to 2:00 p.m. on Friday. Closed Saturdays and Sundays. 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.

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.

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 are made available through the cooperation of many local businesses, industrial and governmental agencies. Although specific job skills are often required, many employers will train on the job.

Full and part-time jobs are available, as well as student internship positions through the Student Training and Employment Placement Program. Employment listings may be viewed at the Career Services Center or through the Internet at http://www3.cerritos.edu/student-services/job-placement.

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 or "e-mail" jobplacement-info@cerritos.edu

CAREER SERVICES CENTER

As part of our commitment to student success, the Career Services 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 Services 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.

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.

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.

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.

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.

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 Art, Math, Science, Dramatic Play, Art, Music, Fine and Gross Motor Development, and Social Studies. Registration for the Center takes place each semester on a first-come, first-served basis on 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 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, cartoons or posters.
2. Continuing to express sexual interest after being informed that the interest is unwelcome. (Reciprocal attraction is not considered sexual harassment.)
3. Making reprisals, threats of reprisals, or implied threats of reprisals following a negative response. For example:
   a. within the work environment - either implying or actually withholding support for an appointment, promotion, or change of assignment, suggesting a poor performance report will be prepared, or suggesting probation will be failed.
   b. within the educational environment - either implying or actually withholding grades earned or deserved, suggesting a poor performance evaluation will be prepared, or suggesting a scholarship recommendation or college application will be denied.
4. Within the work environment, engaging in implicit or explicit coercive sexual behavior which is used to control, influence, or affect the career, salary, and/or work environment of another employee. Within the educational environment, engaging in implicit or explicit coercive sexual behavior which is used to control, influence, or affect the educational opportunities, grades, and/or learning environment of a student.
5. Offering favors or educational or employment benefits, such as grades or promotions, favorable performance evaluations, favorable assignments, favorable duties or shifts, recommendations, reclassifications, etc. in exchange for sexual favors.

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

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

Honors and Awards

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 the individual's need and resources.

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

The Financial Aid Office is part of the Student Affairs department and is located in the Administration building. Office hours are Monday and Tuesday, 10 a.m. - 2:00 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 be 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 I.D., 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

Cal Grants are State programs that offers three grants. Applications for the Cal Grant are available in January of each year and must be filed no later than the early March deadline date.

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 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, first year college students with living expenses, books, supplies, transportation and other non-tuition costs. Renewal may cover tuition/fee costs. All new awards are limited to students who have completed no more than one full-time semester or 16 units. The average award at Cerritos College is approximately $1,400 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 average award at Cerritos College is approximately $530 per year. This grant is renewable for up to two or three years, provided you remain eligible.

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. Scholarships also vary in amounts from $50 - $500 per year. Applications are available in the Financial Aid Office.

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 attempted that is counted for the major.
C. A minimum of 12 units of degree applicable work must be completed at Cerritos College.
D. The student must be in attendance for the semester in which the degree is earned. Exception to this requirement is by petition only.

PETITION FOR ASSOCIATE IN ARTS DEGREE

1. Students desiring an Associate in Arts Degree must file a "Petition for Associate in Arts Degree" form. The petition may be obtained in the Counseling Center and must be submitted before the deadline posted in the College 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,I or W) in any semester, fall or spring, during each academic year. Continuous attendance is not broken at Cerritos College if a student transfers to another accredited institution, maintains his/her continuous attendance at that institution, and returns to Cerritos College to complete his/her degree. (Designated programs may require students to return to Cerritos College in good standing. Please check with the Counseling Center regarding these programs.)
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 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—including 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 curricula designed for a specific occupational goal. In order to obtain a Certificate, a student must satisfy the following requirements:

1. Complete the course requirements for the chosen program of study as detailed in the "Programs of Study" section of this catalog.
2. Maintain a minimum grade point average of " C" (2.0) in all required courses, including a GPA of 2.0 for all departmental courses specified, as well as a 2.0 for all 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 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.

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.

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

Associate in Arts Degree Unit Requirements For Graduation 2000-01

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 Credit or "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 two of the three groups listed below:

(1) PHYSICAL SCIENCES
Astronomy 101, 101L (LAB), 102, 103
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
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
Anthropology 100, 120, 200, 201, 202, 203
Child Development/Early Childhood 113
Counseling and Guidance 200
Economics 101, 201, 202, 204
Geography 102, 105, 257
History 110, 120, 210, 230, 240 241, 245, 250, 255, 257, 260, 265, 270
Political Science 110, 210, 220
Psychology 101, 150, 251, 261
Sociology 101, 110, 120, 201, 210, 215, 225, 230, 250
Speech 110

   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, 102, 103, 104, 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, 230A, 230B, 232, 233, 234, 235, 237, 246A, 246B, 248A, 248B
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
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, 101, 102, 110A, 110B, 112, 114, 115, 116, 140
Philosophy 106, 202
Psychology 103, 210
Reading 200
Speech 60, 100, 120, 130, 132, 235, 271
Technical Mathematics 50

NOTE: The preceding graduation requirements apply to students who were in attendance during the 2000-01 school year and thereafter. Students who enrolled prior to Fall 2000 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 bear in mind that admission and subject requirements will vary from school to school. Consequently, students planning to transfer should study carefully the requirements set forth in the catalogs and brochures of the institutions which interest them. Such publications may be obtained directly from the colleges and universities. 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 freshman applicants 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.

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.

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 information about when to submit your official high school transcript. Transcripts must be received in sealed envelopes directly from the high school from which you graduated.

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

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

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

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

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 the one course in category 2 and choose one course from category 3.

1. ORAL COMMUNICATION
   Speech 100, 120, 130, 132
2. WRITTEN COMMUNICATION
   English 100
3. CRITICAL THINKING
   English 103, Philosophy 106, 202, Psychology 103, Speech 235

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

1. PHYSICAL SCIENCES
   Astronomy 101, 101L (LAB), 102, 103
   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
   Physics 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), 200 (LAB)
   Botany 120 (LAB)
   Microbiology 200 (LAB)
   Psychology 241
   Zoology 120 (LAB)
3. MATHEMATICAL CONCEPTS
   Mathematics 100, 101, 102, 110A, 110B, 112, 114, 115, 116, 140
   Psychology 210

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

1. FINE ARTS
   Architecture 112
   Art 100, 101, 102, 103, 106, 107, 110
   Music 100, 102, 103, 104, 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, 230A, 230B, 232, 233, 234, 235, 237, 246A, 246B, 248A, 248B
   French 101, 102, 201, 202
   German 101, 102, 201, 202
   Humanities 104
   Japanese 101, 102, 201, 202
   Philosophy 100, 102, 104, 200, 201, 204, 206
   Spanish 101, 102, 111, 112, 201, 202, 206, 210
   Speech 140

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

1. AMERICAN HISTORY
   History 101, 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, 201, 202, 204
   Geography 102, 105, 257
   History 110, 120, 210, 230, 240, 241, 245, 250, 257, 260, 265
   Political Science 110, 210, 220
   Psychology 101, 251, 261
   Sociology 101, 201, 210, 215, 230
   Speech 110

E. SELF-DEVELOPMENT: 3 units minimum
Choose one course from the following:
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 1996-97 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
Anatomy and Physiology 120, 130, 200, 201
Anthropology 100, 101, 115, 120, 200, 201, 202, 203, 250, 251
Architecture 50, 51, 110, 111, 112, 113, 121, 122, 211, 212, 221, 222
Art 100, 101, 102, 103, 104, 105, 106, 107, 110, 111, 112, 113, 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, 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, 265, 270, 271, 284, 285, 287A, 287B
Astronomy 101, 101L, 102, 103
Autobody 287
Auto Technology 100, 120, 121, 130, 131, 140, 141, 150, 160, 161, 170, 180, 190, 192, 223, 224, 225, 226, 231, 233, 243, 245L, 280
Biology 100, 105, 110, 115, 120, 180L, 200, 201, 250L
Botany 120
Business Accounting 100, 101, 102, 130, 131, 133, 134, 171, 172, 173, 174, 201, 202, 240, 241, 250, 251, 270, 280
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
Business Administrative Support Systems 108, 110, 112, 114, 116, 120, 131, 133, 134, 135, 155, 161, 162, 163, 173, 174
Business Communications 147, 148, 150, 151, 152
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
Business Paralegal 100, 101, 102, 103, 104, 105, 106, 107, 108, 112, 113, 114, 115, 120, 171, 172, 173, 174, 220, 230, 240, 250
Business Real Estate 101, 120, 125, 130, 131, 140, 151, 160, 172, 173, 174
Chemistry 100, 110, 111, 112, 205, 211, 212, 250
Child Development 110, 115, 124, 137, 138
Child Development/Early Childhood 64, 111, 112, 113, 133, 173, 174, 230
Child Development School Age 152, 155, 259
Computer and Information Sciences 101, 102, 103, 105, 110, 120, 121, 125, 140, 141, 142A, 142B, 151, 155, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 182, 195, 201, 205, 207, 210, 212, 214, 220, 221, 222, 224, 230, 240, 251, 253, 280, 282, 284, 292
Counseling and Guidance 100, 200, 210
Culinary Arts 101, 120
Dental Hygiene 110, 111, 112, 114, 115C, 119, 120, 125, 125C, 126, 127, 128, 129, 150, 232L, 234, 235, 235C, 238, 239, 244, 245, 245C, 248L, 249, 250
Drafting 117, 131, 133, 138, 153, 237, 254, 258
Earth Science 101, 101L, 104, 106, 110, 180
Economics 101, 201, 202, 204
Educational Technology 15
Electronics 100, 110, 110L, 114, 114L, 120, 120L, 124, 124L, 134, 200, 200L, 202, 205, 210, 210L, 212, 212L, 215, 220, 220L, 222, 244
Energy 110
Engineering 112, 115, 123, 135
English 100, 102, 103, 106, 107, 108, 155, 221A, 221B, 222, 223, 224, 225, 226, 227, 228, 229, 230A, 230B, 232, 233, 234, 235, 237, 240, 241, 246A, 246B, 248A, 248B
French 101, 102, 201, 202, 203, 281, 282, 283
Geography 101, 102, 105, 106, 257
Geology 100, 101, 110, 201, 204, 207, 209,
German 101, 102, 201, 202, 203, 204, 281, 282, 283, 291, 292
Health Education 100, 110
Health Occupations 151, 152, 236, 237
History 101, 110, 120, 201, 202, 210, 220, 221, 230, 240, 241, 245, 246, 250, 255, 257, 260, 265, 270
Humanities 100, 103, 104, 105
Japanese 101, 102, 201, 202, 281, 282, 283
Journalism 100, 101, 103, 104, 105, 106, 110, 120, 130, 160L, 170, 201, 220, 225
Library 100
Machine Tool Technology 100, 154, 170, 172, 278
Manufacturing Technology 100
Mathematics 100, 101, 102, 103, 110A, 110B, 112, 114, 115, 116, 140, 150A, 170A, 190A, 220, 240
Medical Assisting 161
Metallurgy and Materials Science 100A, 120, 130A
Microbiology 200
Music 100, 102, 103, 104, 104B, 105, 106, 107, 108, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135,136, 137, 138, 139, 140, 142, 143, 144, 145, 146, 148, 149, 150, 151
Nursing 200, 207, 208, 210, 211, 212, 213, 214, 215, 218, 219, 220, 222, 230, 232, 240, 242, 251, 270, 280
Ornamental Horticulture 100, 110, 120, 130, 140, 150, 160, 180, 190
Philosophy 100, 102, 104, 106, 200, 201, 202, 204, 206
Photography 100, 102, 110, 112, 120, 122, 124, 160, 200, 220, 230, 232, 234, 240, 242, 250, 252
Physical Education 100, 101, 102, 103, 104, 105, 106, 107, 108, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 130, 131, 132A, 132B, 134, 135A, 135B, 137, 138, 140, 141, 142, 143, 144L, 150A, 150B, 151, 152, 153A, 153B, 154A, 154B, 155A, 155B, 156A, 156B, 156C, 157, 158A, 158B, 159A, 159B, 160, 170, 171A, 171B, 171C, 172A, 172B, 175A, 175B, 176A, 176B, 177, 178, 179A,

179B, 180, 181, 182A, 182B, 183, 184, 185, 186A, 186B, 187, 188, 189, 190, 191, 200, 201, 202, 204, 206, 207, 208, 210, 211, 212, 213, 217, 219, 221, 222, 223, 225, 227, 229, 231, 233, 234, 235, 236, 239, 241, 243, 245, 254, 255, 260, 261
Physical Science 100
Physical Therapist Assistant 110, 120, 125, 126, 128, 230, 233, 235, 236, 240, 245, 246
Physics 100, 101, 102, 201, 202, 203
Plastics 100, 221
Political Science 101, 110, 201, 210, 220, 230
Psychology 101, 103, 139, 149, 150, 210, 220, 241, 251, 261, 271
Reading 100, 100A, 100B, 200
Sociology 101, 110, 120, 201, 210, 215, 220, 225, 230, 250
Spanish 101, 102, 103A, 103B, 111, 112, 201, 202, 205, 206, 210, 213, 223, 245, 281, 282, 283
Speech-Language Pathology 100, 110, 120L, 125, 230, 235, 240, 245
Speech 100, 110, 120, 130, 132, 140, 145, 160, 165, 229, 235, 236, 237, 238, 239, 240, 271
Theatre 101, 102, 103, 104, 105, 108, 110, 111, 114, 115, 120, 123, 130A. 130B, 130C, 131A, 131B, 135, 136, 140, 141, 142, 143, 144, 145, 150, 151, 152, 153, 155, 156, 159, 160, 212, 213, 216, 221, 222, 226, 254, 258
Welding 100, 110, 120, 130, 170, 200, 210L, 220, 240, 250L
Woodworking Manufacturing Technologies 101, 102, 107, 111L, 118, 132, 134, 137, 148, 151, 153, 155, 171, 181, 202, 211, 228L, 229L, 233, 248, 249L, 251, 253, 268, 281
Zoology 120

UNIVERSITY OF CALIFORNIA
Minimum Admission Requirements
Admission as a Freshman

The University considers you a freshman applicant if you have graduated from high school and have not enrolled in a regular session at any college or university. If you attend a summer session immediately after graduating from high school, you are still a freshman applicant.

The freshman admission requirements described in this section represent the minimum level of achievement you must demonstrate to be eligible for admission to the University.

CALIFORNIA RESIDENTS*

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: 1 year required.
   One year of United States history or one-half year of United States history and one-half year of civics or American government.
b. English: 4 years required.
   Four years of college preparatory English which include frequent and regular writing, and reading of classic and modern literature, poetry, and drama. Not more than two semesters of 9th grade English can be used to meet this requirement.
c. Mathematics: 3 years required, 4 recommended.
   Three years, including elementary algebra, geometry, and second-year (advanced) algebra. Math courses taken in the 7th and 8th grades may be used to fulfill part of this requirement if your high school accepts them as equivalent to its own courses.
d. Laboratory Science: 1 year required, 3 recommended.
   One year of a laboratory science, such as biology, chemistry, or physics, taken in the 10th grade or later.
e. Foreign Language: 2 years required, 3 recommended.
   Two years of the same foreign language. Courses should emphasize speaking and understanding, and include instruction in grammar, vocabulary, reading and composition.
f. College Preparatory Electives: 4 years required.
   Four units (8 semesters), in addition to those required in "a-e" above, chosen from at least two of the following areas: history, English, advanced mathematics, laboratory science, foreign language (a third year in the foreign language used for the "e" requirement above, or two years of another foreign language), social science, and visual and performing arts. A 9th grade science course is an acceptable elective.

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.

HONORS 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: A5 points, B4 points, C3 points. D 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 they 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.

ELIGIBILITY INDEX

"a-f" GPA	ACT1 Composite	SAT2 Total	"a-f" GPA	ACT1 Composite	SAT2 Total
2.78	35	1600	3.05	22	970
2.79	35	1580	3.06	21	950
2.80	34	1550	3.07	21	920
2.81	34	1530	3.08	20	900
2.82	33	1510	3.09	19	880
2.83	33	1480	3.10	18	850
2.84	33	1460	3.11	18	830
2.85	32	1440	3.12	17	810
2.86	32	1410	3.13	16	780
2.87	32	1390	3.14	15	760
2.88	31	1370	3.15	14	740
2.89	31	1340	3.16	14	710
2.90	30	1320	3.17	13	690
2.91	30	1300	3.18	12	670
2.92	29	1270	3.19	11	640
2.93	29	1250	3.20	10	620
2.94	28	1230	3.21	9	600
2.95	28	1200	3.22	9	570
2.96	27	1180	3.23	8	550
2.97	27	1160	3.24	8	530
2.98	26	1130	3.25	7	500
2.99	26	1110	3.26	7	480
3.00	25	1090	3.27	6	460
3.01	25	1060	3.28	6	430
3.02	24	1040	3.29	5	410
3.03	24	1020	3.30	5	400
3.04	23	990			

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 2000-01 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 divisions general education requirements at any CSU or UC campus. The IGETC is intended to facilitate course planning and should appeal to students who want to keep their options open before making a final decision about transferring to a particular segment or campus. The IGETC will provide an option to the California State University General Education Requirements 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. A student who has completed IGETC may have an official certification sent to a four-year institution upon written request by the student through the Office of Admissions and Records.

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

AREA 1 ENGLISH COMMUNICATION

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

A) English Composition
   (1 course, 3 semester/4-5 quarter units)
   English 100
B) Critical Thinking-English Composition
   (1 course, 3 semester/4-5 quarter units)
   English 103
   Philosophy 202
   Psychology 103
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+, 101+, 102, 103, 112, 114, 115, 116+, 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 100. Completion of an IGETC Area 2 course (except Math 100) will meet both the UC math admissions and IGETC area 2 requirements. Completion of Math 100 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
Architecture 112
Art 100, 101, 102, 103, 106, 110
Music 100+, 103, 104, 105
PE 189
Theatre 101,102, 103, 104, 150, 159

B) Humanities
English 221A, 221B, 223, 224, 225, 226, 227, 228, 230A, 230B, 232, 233, 234, 235, 237, 246A, 246B, 248A, 248B
French 201, 202
German 102, 201, 202
History *101+, *110, *120, *201+, *202+, *220, *221, *230, *240, *241, *250, *255, *260, *265
Humanities 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+, 201, 202+
Geography 102, 105
History *101+, *110, *120, *201+, *202+, 210+, *220, *221+, *230, *240, *241, *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

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

B) Biological/Life Sciences
Anatomy and Physiology 120+ (lab), 130+ (lab), 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.
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 — *Bringing it all together for Business!*

OFFICE OF ECONOMIC DEVELOPMENT

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

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

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

For further information please call the Office of Economic Development at (562) 860-2451, ext. 2497.

APPLIED TECHNOLOGY EDUCATION CENTER (ATEC)

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

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

ATEC is proud to have been designated as an authorized 3Com(r) technical training center and demonstration site. Courses offered include those needed to become 3Com(r) certified, as well as classes designed to enhance professional growth and development. The 3Com(r) Master of Network Science Program offers certification tracks in network design, network management, wide area network and remote access solutions for current industry professionals desiring to expand their skills and career opportunities.

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

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 force 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-Real Estate-Makeup Design-Fingernail Art-EMT Recertification-Coronal 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 • Vocation English as a Second Language • Parenting • Elementary and Secondary Basic Skills
Courses for Immigrants • Educational Programs for Persons with Disabilities • Short-term Vocational Programs
Educational Programs for Older Adults

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

Senior Exercise • Massage • Arts 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, orientation, and vocational college programs.

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

To learn about specific classes and programs offered 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 In: (562) 467-5050. Have your VISA or MASTERCARD number ready

Mail In: Use the detachable registration form in the Calendar of Events

Fax In: 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 seeks to provide the margin of excellence that has been the hallmark of Cerritos College by offering enhanced and broader educational experience, activities and opportunities both inside and outside the classroom.

The Foundation is a separate, not-for-profit, IRS approved 501(c)(3) corporation chartered in 1979 to provide financially for the educational needs of Cerritos College that cannot be met through state support. 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.

As a public institution the Foundation's work is guided by a strategic plan approved by the Board and implemented by the Foundation's staff with the active assistance of the college staff and Board of Directors. The Foundation's strategic plan defines the Foundation as essentially seeking endowments to assure future income for vital college programs and services. It provides a focus on long term goals as having a priority over short-term objectives. All endowment earnings are dedicated to provide supplementary funding to sustain Cerritos College's dedication to excellence. The Foundation concentrates on raising friends who may in the future also provide us with financial support.

A comprehensive planned giving program is offered through the Foundation. It seeks deferred contributions through bequests, gifts of life insurance, pooled income funds, charitable gift annuities, and the establishment of lead trusts and charitable remainder annuity.

The Foundation seeks your assistance in the form of contributions of real property, pledges, cash gifts, memorial donations and other gifts of value that will make this Foundation a meaningful, responsive community organization.

Should you wish to discuss the Foundation and have its goals explained to you, please feel free to contact the Foundation Office on campus at (562) 860-2451, extension 2526.

Students preparing to register for the Fall 2000 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:	298 (1 unit Directed Studies) 299 (2 units Directed Studies)
Work Experience:	171 (1 unit Work Experience) 172 (2 units Work Experience) 273 (3 units Work Experience) 274 (4 units Work Experience)

OLD NO.	NEW NO.	COURSE TITLE
AJ 1	AJ 101	Introduction to Administration of Justice
AJ 2.1	AJ 102	Concepts of Criminal Law
AJ 2.2	AJ 202	Substantive Law
AJ 3	AJ 103	Criminal Procedures
AJ 4	AJ 104	Criminal Evidence
AJ 5	AJ 105	Community Relations
AJ 8	AJ 208	Special Issues in Law Enforcement
AJ 10	AJ 110	Concepts of Enforcement Service
AJ 11	AJ 91	Report Writing Procedures
AJ 13	AJ 71	First Aid — Administration of Justice
AJ 20	AJ 220	Criminal Investigation
AJ 21	AJ 221	Narcotics and Vice Control
AJ 22	AJ 222	Juvenile Procedures
AJ 30	AJ 130	Traffic Control and Investigation
AJ 50	AJ 150	Introduction to Corrections
AJ 73	AJ 173	AJ Occupational Work Experience
AJ 80	AJ 180	Introduction to Private and Business Security
A & P 10	A & P 120	Introduction to Human Anatomy & Physiology
A & P 40	A & P 130	Human Anatomy and Physiology
A & P 52	A & P 200	Human Anatomy
A & P 53	A & P 201	Human Physiology
ANTH 1	ANTH 115	Human Evolution and Variation
ANTH 2	ANTH 100	Cultural Anthropology
ANTH 3	ANTH 120	Introduction to Archaeology
ANTH 4	ANTH 200	Native Peoples of North America
ANTH 5	ANTH 101	Faces of Culture
ANTH 10	ANTH 201	Native People of California
ANTH 11	ANTH 203	The Anthropology of Magic, Witchcraft, and Religion
ANTH 12	ANTH 202	The Maya, Inca and Aztecs: Ancient Civilizations of the Americas
ANTH 16	ANTH 250	Introduction to Field Archaeology
ANTH 17	ANTH 251	Field Trips in Archaeology
ARCH 10	ARCH 110	Introduction to Architecture
ARCH 11	ARCH 111	Architectural Drafting
ARCH 12	ARCH 112	History of Architecture
ARCH 20	ARCH 113	Building Codes
ARCH 21	ARCH 121	Materials & Methods of Building Construction
ARCH 22	ARCH 50	Introduction to Computer Aided Drafting for Architecture
ARCH 30	ARCH 122	Architectural Delineation
ARCH 31	ARCH 211	Architectural Design, Programming, and Presentation
ARCH 32	ARCH 212	Architectural Design Theory I
ARCH 33	ARCH 51	Advanced Applications of Computer Aided Drafting for Architecture
ARCH 41	ARCH 221	Working Drawing/Architectural Desktop
ARCH 42	ARCH 222	Architectural Design Theory II
ARCH 73	ARCH 43	Architectural Work Experience
ARCH 74	ARCH 44	Architectural Work Experience
ART 1	ART 101	Appreciation and History
ART 2	ART 102	Appreciation and History
ART 3	ART 103	Modern and Contemporary Appreciation
ART 4	ART 104	Contemporary Art Practices
ART 5	ART 105	Women Artists
ART 6	ART 106	Mexican Art
ART 7	ART 100	Introduction to World Art
ART 8	ART 107	Asian Art History
ART 10	ART 110	Freehand Drawing
ART 11	ART 111	Intermediate Freehand Drawing
ART 12	ART 112	Life Drawing
ART 13	ART 213	Intermediate Life Drawing
ART 14	ART 214	Special Studies in Life Drawing
ART 15	ART 115L	Printmaking Lab
ART 16	ART 116	Beginning Printmaking
ART 17	ART 117	Intermediate Printmaking
ART 18	ART 218	Screenprinting
ART 19	ART 219	Advanced Etching
ART 20	ART 120	Two-Dimensional Design
ART 21	ART 121	Three-Dimensional Design
ART 22	ART 50	Chinese Brush Painting
ART 30.1	ART 130A	Fundamentals of Painting
ART 30.2	ART 130B	Fundamentals of Painting
ART 31	ART 231	Intermediate Painting
ART 32	ART 232	Portraiture: Drawing/Painting the Head
ART 33.1	ART 133A	Watercolor Painting
ART 33.2	ART 133B	Watercolor Painting

OLD NO.	NEW NO.	COURSE TITLE
ART 34	ART 134	Watercolor Landscape Painting I
ART 35	ART 135	Watercolor Landscape Painting II
ART 36	ART 136	Beginning Painting for Art Majors
ART 37	ART 237	Life Painting
ART 38	ART 238	Special Studies in Painting
ART 39	ART 239	Portrait Painting
ART 40	ART 180	Calligraphy I
ART 41	ART 181	Calligraphy II
ART 42	ART 182A	Lettering and Typography
ART 42.1	ART 182B	Lettering and Typography II
ART 44	ART 184	Graphic Design I
ART 44.1	ART 284	Graphic Design II
ART 45	ART 185	Rendering I
ART 45.1	ART 285	Rendering II
ART 47	ART 287A	Letter Arts I
ART 47.1	ART 287B	Letter Arts II
ART 48	ART 186	Computer Graphics in Art and Design
ART 48.1	ART 188	Design for Desktop Publishing
ART 50	ART 150	Beginning Ceramics I
ART 51.1	ART 151	Ceramics-Wheelthrowing
ART 51.2	ART 152	Ceramics-Handbuilding
ART 52	ART 252	Forms and Techniques
ART 53	ART 253	Intermediate Ceramics I
ART 55.1	ART 155	Beginning Ceramic Sculpture
ART 55.2	ART 255	Intermediate Ceramic Sculpture
ART 60	ART 160	Life Modeling
ART 62	ART 162	Sculpture I
ART 63	ART 163	Sculpture II
ART 64	ART 264	Sculpture III
ART 65	ART 265	Sculpture IV
ART 74	ART 144	Jewelry/Metalsmithing
ART 75	ART 145	Jewelry Casting and Molds
ART 76	ART 246	Jewelry Design Fabrication
ART 78	ART 248	Hollow Forming Jewelry Processes
ART 80	ART 170	Beginning Wood Sculpture I
ART 81	ART 171	Beginning Wood Sculpture II
ART 82	ART 270	Wood Lathe Art
ART 83	ART 271	Carving Tool Making
ART 92	ART 192	Digital Imaging
ART 94	ART 194	Multimedia Design
ART 95	ART 195	3D Computer Modeling
ART 96	ART 196	Introduction to Designing Web Graphics
	ART 113	Introduction to Illustration
	ART 156L	Ceramics Lab
	ART 189L	Computer Graphics Lab
	ART 197	Digital Painting
ASTR 1	ASTR 101	Elementary Astronomy
ASTR 1.1	ASTR 102	Introductory Astronomy: Stars and the Universe
ASTR 1.2	ASTR 103	Introductory Astronomy: The Solar System
ASTR 5	ASTR 101L	Observational Astronomy
AB 11	AB 51	Collision Repair I
AB 12	AB 56	Automotive Welding
AB 21	AB 52	Collision Repair II
AB 22	AB 57	Advanced Automotive Welding
AB 24	AB 1	Automotive Collision Damage Estimating I
AB 25	AB 61	Automotive Refinishing I
AB 31.1	AB 53	Collision Repair III
AB 33.1	AB 2	Automotive Paint-Color Matching
AB 34.1	AB 82	Collision Damage Estimating II
AB 34.2	AB 83	Computer Estimating Specialty
AB 35	AB 62	Automotive Refinishing II
AB 35.1	AB 63	Production Automotive Refinishing III
AB 41	AB 54	Collision Repair IV
AB 42	AB 42	Collision Repair V
AB 45	AB 45	Lettering, Striping and Design
AB 48	AB 70	Collision Repair Specialty — A
AB 49	AB 71	Collision Repair Specialty — B
AB 49.1	AB 72	Auto Body Management Specialty
AB 50	AB 80	Autobody Customer Service
AB 51	AB 85	Collision Repair Management
AB 52	AB 86	Collision Repair Productions
AB 53	AB 287	Advanced Collision Repair Management
AB 73	AB 73	Automotive Collision Repair Occupational Work Experience
AB 74	AB 74	Automotive Collision Repair Occupational Work Experience
AUTO 1	AUTO 100	Automotive Maintenance and Operation
AUTO 1.1	AUTO 1	Engine Maintenance
AUTO 1.2	AUTO 2	Fuel Systems
AUTO 1.3	AUTO 3	Lubrication and Cooling
AUTO 1.4	AUTO 4	Electrical Systems
AUTO 1.5	AUTO 5	Brakes and Suspension
AUTO 1.6	AUTO 6	Transmission and Drive Train
AUTO 10	AUTO 50	Introduction to Automotive
AUTO 12	AUTO 120	Automotive Lubrication, Brakes and Wheel Alignment
AUTO 12.1	AUTO 121	Automotive Alignment Brake and Suspension
AUTO 13	AUTO 130	Automotive Electricity
AUTO 13.1	AUTO 131	Automotive Electricity
AUTO 14	AUTO 140	Automotive Engines
AUTO 14.1	AUTO 141	Automotive Engines
AUTO 15	AUTO 150	Automotive Machine Shop I
AUTO 16	AUTO 160	Automotive Power Train
AUTO 16.1	AUTO 161	Automotive Power Train
AUTO 17	AUTO 170	Emission Control Systems — 1993 Standards
AUTO 18	AUTO 180	Automotive Air Conditioning
AUTO 18.1	AUTO 51	Automotive Air Conditioning
AUTO 19	AUTO 190	Automotive Management
AUTO 19.2	AUTO 192	Introduction to Alternative Fuels
AUTO 23	AUTO 223	Automotive Body Electrical
AUTO 24	AUTO 224	High Performance Engines
AUTO 25	AUTO 225	Advanced Automotive Machine Shop II
AUTO 26	AUTO 226	Automotive Automatic Transmissions
AUTO 33	AUTO 233	Electronic Fuel Management Systems
AUTO 43	AUTO 243	Diagnostic Engine Performance
AUTO 43.1	AUTO 231	Automotive Diagnostic Engine Performance

OLD NO.	NEW NO.	COURSE TITLE
AUTO 45	AUTO 245L	Automotive Specialty
AUTO 50	AUTO 8	Ford Electronic Engine Controls EEC 3 & 4
AUTO 51	AUTO 9	Chrysler Electronic Fuel Injection
AUTO 52	AUTO 10	General Motors Fuel Injection
AUTO 53	AUTO 11	Four Wheel Alignment
AUTO 54	AUTO 12	General Motors Climate Control
AUTO 56	AUTO 13	Specialized Electronics Training
AUTO 57	AUTO 14	Import Fuel Injection Systems
AUTO 73	AUTO 73	Automotive Mechanical Repair Occupational Work Experience
AUTO 74	AUTO 74	Automotive Mechanical Repair Occupational Work Experience
AUTO 80	AUTO 280	Automotive GM/Corporate Trends and Careers
AUTO 81	AUTO 52	Automotive Product Analysis
AUTO 82	AUTO 53	Automotive GM/Advanced Consultative Selling
AUTO 90	AUTO 54	Introduction to Electric Vehicles
AUTO 91	AUTO 55	Advanced Technology Electric Vehicles
BIOL 1	BIOL 105	Man and Environment
BIOL 5.1	BIOL 200	Principles of Biology
BIOL 5.2	BIOL 201	Principles of Biology
BIOL 10	BIOL 120	Introduction to Biological Science
BIOL 12	BIOL 110	California Animals and Plants
BIOL 16	BIOL 100	Natural History of So. California
BIOL 20.16	BIOL 180L	Life Science Preparations
BIOL 30.16	BIOL 250L	Special Topics in Biology
BIOL 90	BIOL 115	Marine Biology
BOT 10	BOT 120	Introduction to Plant Science
BUSA 10	BUSA 100	Introduction to Accounting
BUSA 11	BUSA 101	Fundamentals of Accounting I
BUSA 12	BUSA 102	Fundamentals of Accounting II
BUSA 21	BUSA 201	Intermediate Accounting I
BUSA 22	BUSA 202	Intermediate Accounting II
BUSA 30	BUSA 130	Payroll Tax Accounting
BUSA 31	BUSA 131	Computerized Accounting — IBM
BUSA 33	BUSA 133	Spreadsheet Accounting I
BUSA 34	BUSA 134	Spreadsheet Accounting II
BUSA 35	BUSA 60	Quick Books Accounting
BUSA 36	BUSA 61	TurboTax Accounting
BUSA 40	BUSA 240	Cost Accounting
BUSA 50.1	BUSA 250	Income Tax Accounting
BUSA 51.1	BUSA 251	Advanced Income Tax Accounting
BUSA 60	BUSA 241	Managerial Accounting
BUSA 70	BUSA 270	Fundamentals of Auditing
BUSA 71	BUSA 171	Business Acctg. Occupational Work Experience
BUSA 72	BUSA 172	Business Acctg. Occupational Work Experience
BUSA 73	BUSA 173	Business Acctg. Occupational Work Experience
BUSA 74	BUSA 174	Business Acctg. Occupational Work Experience
BUSA 80	BUSA 280	Advanced Accounting
BUSA 98	BUSA 1T	Accounting Microcomputer Tutorial
BUSA 99	BUSA 2T	Accounting Tutorial

OLD NO.	NEW NO.	COURSE TITLE
BA 1	BA 100	Fundamentals of Business
BA 2	BA 101	International Business
BA 3	BA 102	International Business Law
BA 4	BA 104	Cultural Bridges For Business
BA 5	BA 105	Personnel—Policy and Procedures
BA 6	BA 52	Fundamentals of Importing and Exporting
BA 11	BA 111	Business Law
BA 12	BA 112	Business Law
BA 13	BA 113	Legal Environment of Business
BA 14	BA 51	Legal Aspects of Management
BA 15	BA 50	Business Math
BA 16	BA 61	Everyday Law
BA 20	BA 200	Principles of Banking
BA 21	BA 201	Money and Banking
BA 30	BA 117	Introduction to Supervision
BA 31	BA 107	Human Relations in Business
BA 32	BA 108	Labor Management Relations
BA 40	BA 115	Management — Business
BA 41	BA 53	Small Business Management
BA 42	BA 106	Human Resource Management
BA 43	BA 118	Management — Retailing
BA 49	BA 149	Current Management Theory
BA 50	BA 121	Sales
BA 55	BA 114	Marketing
BA 61	BA 54	Retail Display
BA 62	BA 110	Advertising
BA 63	BA 55	Introduction to Logistics
BA 66	BA 123	Fundamentals of Retailing
BA 71	BA 171	Business Administration Work Experience
BA 72	BA 172	Business Admin. Occupational Work Experience
BA 73	BA 173	Business Admin. Occupational Work Experience
BA 74	BA 174	Business Admin. Occupational Work Experience
BA 81	BA 120	Management-Accounting and Internal Control
BA 82	BA 119	Management-Supermarket
BA 83	BA 203	Management-Department Operations
BA 84	BA 56	Motivation in Management
BA 90	BA 57	Inventory Management
BA 91	BA 206	Production Activity Control
BA 92	BA 207	Capacity Management
BA 93	BA 58	Just-In-Time Inventory Management
BA 94	BA 59	Material Requirements Planning (MRP)
BA 95	BA 60	Master Scheduling
BASS 2	BASS 62	Computer Keyboarding
BASS 3	BASS 3T	Word Processing/Tutorial
BASS 8	BASS 108	WordPerfect for Windows
BASS 9	BASS 50	Advanced WordPerfect for Windows
BASS 10	BASS 110	Desktop Publishing—WordPerfect for Windows
BASS 12	BASS 112	Microsoft Word for Windows
BASS 13	BASS 51	Advanced Microsoft Word for Windows

OLD NO.	NEW NO.	COURSE TITLE
BASS 14	BASS 114	Introduction to Microsoft Office for Office Personnel
BASS 16	BASS 116	Desktop Publishing — Word for Windows
BASS 17	BASS 80	Processing Law Office Documents
BASS 20	BASS 120	Word Processing Office Simulation
BASS 30	BASS 1T	Individualized Office Skills
BASS 31	BASS 131	Beginning Typing/Keyboarding
BASS 32	BASS 61	Typing/Keyboard Review
BASS 33	BASS 133	Intermediate Typing/Keyboarding
BASS 34	BASS 134	Advanced Typewriting
BASS 35	BASS 135	Typewriting Speed/Control Building
BASS 36	BASS 36T	Typing/Tutorial
BASS 50	BASS 81	Legal Office Procedures
BASS 51	BASS 82	Spanish Legal Office Terminology/ Vocabulary
BASS 55	BASS 155	Administrative Secretarial Procedures
BASS 60	BASS 60	Telephone Techniques/Customer Service
BASS 61	BASS 161	Principles of Filing
BASS 62	BASS 162	Business Spelling and Proofreading Skills
BASS 63	BASS 163	Machine Transcription
BASS 64	BASS 83	Legal Office Terminology/Machine Transcription
BASS 65	BASS 70	Medical Machine Transcription
BASS 67	BASS 71	Computers in the Medical Office
BASS 73	BASS 173	Business Administrative Support Systems Occupational Work Experience
BASS 74	BASS 174	Business Administrative Support Systems Occupational Work Experience
BCOM 40	BCOM 1T	Individualized Business Communication Skills
BCOM 46	BCOM 46	Business Communications
BCOM 47	BCOM 147	Business Communications
BCOM 48	BCOM 148	Effective Business Presentations
BCOM 49	BCOM 45	Effective Communication for Managers
BCOM 50	BCOM 150	International Business Communication
BCOM 51	BCOM 151	Computer Applications/Business Documents
BCOM 52	BCOM 152	Job Search in the Business Field
BCIS 1	CIS 50	Basic Computer Literacy
BCIS 6	CIS 51	Data Entry
BCIS 11	CIS 151	Microsoft Excel
BCIS 11.1	CIS 54A	Excel for Windows —Part 1
BCIS 11.2	CIS 54B	Excel for Windows —Part 2
BCIS 12	CIS 53	Microsoft PowerPoint
BCIS 13	CIS 110	Introduction to Desktop Publishing —Microsoft Publisher
BCIS 14	CIS 155	Microsoft Access
BCIS 15	CIS 102	Introduction to Microcomputers Using Microsoft Office
BCIS 15.1	CIS 5A	Business Computer Information Systems 15.1 Word Processing
BCIS 15.2	CIS 5B	Business Computer Information Systems 15. 2 Spreadsheet Module
BCIS 15.3	CIS 5C	Business Computer Information Systems 15.3 Database Module
BCIS 15.4	CIS 5D	Business Computer Information Systems 15.4 PowerPoint/Internet
BCIS 16	CIS 170	Programming in Basic
BCIS 20	CIS 56	Microcomputer Disk Operating Systems
BCIS 21	CIS 57	Advanced Topics in Microcomputer Disk Operating Systems
BCIS 23	CIS 141	AS/400 Operations
BCIS 23.1	CIS 142A	AS/400 Operations - Part 1
BCIS 23.2	CIS 142B	AS/400 Operations/Facilities - Part 2
BCIS 23.3	CIS 2T	AS/400 Tutorial Lab
BCIS 25	CIS 80	Programming in Access
BCIS 30	CIS 52	Data Processing Mathematics
BCIS 31	CIS 140	Query/400
BCIS 34	CIS 105	Windows 95
BCIS 36	CIS 207	SQL Programming
BCIS 39	CIS 214	UNIX
BCIS 40	CIS 101	Introduction to Business Computer Information Systems
BCIS 48	CIS 82	Visual Basic Scripting
BCIS 56	CIS 103	Computer Programming Logic
BCIS 57	CIS 175	RPG Programming
BCIS 58	CIS 176	COBOL Programming
BCIS 61	CIS 201	Systems Analysis and Design
BCIS 62	CIS 251	Advanced Systems Analysis and Design
BCIS 66	CIS 240	AS/400 Control Language Programming
BCIS 67	CIS 222	Advanced RPG Programming
BCIS 68	CIS 75	SQL Administration and Implementation
BCIS 71	CIS 224	Advanced COBOL Programming
BCIS 72.1	CIS 171	Business Computer Information Systems Occupational Work Experience
BCIS 72.2	CIS 172	Business Computer Information Systems Occupational Work Experience
BCIS 73	CIS 173	Business Computer Information Systems Occupational Work Experience
BCIS 74	CIS 174	Business Computer Information Systems Occupational Work Experience
BCIS 75	CIS 205	Programming in HTML for the World Wide Web
BCIS 76	CIS 120	Web Design with Microsoft FrontPage
BCIS 77	CIS 3	Computer Utilization
BCIS 78	CIS 212	Microsoft Windows NT
BCIS 78.1	CIS 212A	Microsoft Windows NT - Part 1
BCIS 78.2	CIS 212B	Microsoft Windows NT - Part 2
BCIS 79	CIS 284	CGI and PERL Programming
BCIS 80	CIS 210	Local Area Networks
BCIS 81	CIS 195	Business Data Communications Systems

OLD NO.	NEW NO.	COURSE TITLE
BCIS 82	CIS 121	Introduction to the Internet
BCIS 82.1	CIS 72	TCP/IP on Microsoft Windows NT
BCIS 83	CIS 180	Programming in C/C++
BCIS 84	CIS 179	Visual Basic Programming
BCIS 86	CIS 253	Client/Server Development with Powerbuilder
BCIS 88	CIS 221	Advanced Visual Basic
BCIS 89	CIS 220	Windows Programming
BCIS 90	CIS 280	Object-Oriented Programming in C++
BCIS 91	CIS 125	JAVA script Programming
BCIS 92	CIS 182	JAVA Programming
BCIS 93	CIS 282	Advanced JAVA Programming
BCIS 94.1	CIS 84	Microsoft Internet Information Server
BUSC 8	BUSC 1T	CAT Tutorial Lab
BUSC 9	BUSC 5T	CSR Qualifying Exam Transcription Lab
BUSC 10	BUSC 2T	Computer-Aided Transcription Lab
BUSC 11	BUSC 3T	Business Court Reporting - Typing Lab
BUSC 12	BUSC 4T	Business Court Report - Tape Lab
BUSC 13	BUSC 113	Legal Terminology
BUSC 14	BUSC 114	Medical Terminology for Machine Shorthand
BUSC 15	BUSC 115	Medical Shorthand for Court Reporters
BUSC 16	BUSC 116	Introduction to Courtroom Procedures
BUSC 17	BUSC 57A	Beginning Aural Language Skills for Court Reporters
BUSC 17.1	BUSC 57B	Advanced Aural Language Skills for Court Reporters
BUSC 18	BUSC 118	Deposition Procedures, Codes and Ethics
BUSC 19.1	BUSC 119A	Beginning Computer-Aided Transcription
BUSC 19.2	BUSC 119B	Intermediate Computer-Aided Transcription
BUSC 19.3	BUSC 119C	Advanced Computer-Aided Transcription
BUSC 19.4	BUSC 119D	Basic Concepts of Realtime
BUSC 19.5	BUSC 119E	Computer-Aided Medical Dictionary Build
BUSC 19.6	BUSC 119F	Computer-Aided Legal Dictionary Build
BUSC 25	BUSC 125	Computerized Shorthand Realtime Practicum I
BUSC 26	BUSC 126	Computerized Shorthand Realtime Practicum II
BUSC 27	BUSC 127	Computerized Shorthand Realtime Practicum III
BUSC 28	BUSC 128	Computerized Shorthand Realtime Practicum IV
BUSC 29	BUSC 129	Computerized Shorthand Realtime Practicum V
BUSC 30	BUSC 130	Computerized Shorthand Realtime Practicum VI
BUSC 39	BUSC 139	Exploring Career Opportunities in Court Reporting
BUSC 40	BUSC 140	Computerized Shorthand Theory
BUSC 41	BUSC 141	Computerized Shorthand Theory Review/Skill Development
BUSC 42	BUSC 142	Intermediate Computerized Shorthand
BUSC 43	BUSC 143	Computerized Shorthand Speed Building I
BUSC 44	BUSC 144	Computerized Shorthand Speed Building II
BUSC 45	BUSC 145	Computerized Shorthand Speed Building III
BUSC 46	BUSC 146	Computerized Shorthand Speed Building
BUSC 47	BUSC 147	Computerized Shorthand Speed Building
BUSC 48	BUSC 148	Computerized Shorthand Speed Building
BUSC 49	BUSC 149	Computerized Shorthand Speed Building
BUSC 52	BUSC 152	Introduction to Jury Charge Intermediate Computerized Shorthand
BUSC 53	BUSC 153	Multiple-Voice Colloquy I Computerized Shorthand Speed Building I
BUSC 54	BUSC 154	Introduction to Congressional Record Computerized Shorthand Speed Building II
BUSC 55	BUSC 155	Multiple-Voice Colloquy II Computerized Shorthand Speed Building II
BUSC 56	BUSC 156	Jury Voir Dire Procedures Computerized Shorthand Speed Development
BUSC 57	BUSC 157	Congressional Testimony Computerized Shorthand Speed Development
BUSC 58	BUSC 158	Professional Practices Hearings/ Conferences Computerized Shorthand Speed Development
BUSC 59	BUSC 159	In Curia/In Camera Procedures Computerized Shorthand Speed Development
BUSC 73	BUSC 173	Business Court Reporting/Computerized Shorthand Occupational Work Exp.
BUSC 74	BUSC 174	Business Court Reporting/Computerized Shorthand Occupational Work Exp.
BUSC 80	BUSC 180	Computerized Shorthand Speed Building
BUSC 81	BUSC 181	Computerized Shorthand Speed Building
BUSC 85	BUSC 185	CSR/RPR Examination Preparation
BUSC 90	BUSC 190	Medical Transcription/Court Reporting Method
BUSC 91	BUSC 191	Medical Transcription II/Court Reporting Method
BUSC 92	BUSC 192	Transcription Procedures
BUSC 92.1	BUSC 50	Computer - aided Proofreading

OLD NO.	NEW NO.	COURSE TITLE
	BUSC 193	Basic Captioning
BUSF 15	BUSF 50	Electronic Calculators/Business Applications
BUSF 25	BUSF 125	Personal Finance
BUSF 26	BUSF 126	Introduction to Stock Market and Investments
BUSF 30	BUSF 51	Retirement Planning and Investing
BL 1	BL 101	Introduction to Law
BL 2	BL 100	Introduction to California Civil Procedures
BL 3	BL 102	Advanced California Civil Procedures
BL 4.1	BL 103	Legal Research
BL 4.2	BL 104	Advanced Legal Research
BL 5	BL 52	Law Office Management
BL 6	BL 106	Bankruptcy Law
BL 7	BL 107	Probate Procedures
BL 8	BL 108	Family Law Procedures
BL 9	BL 56	Introduction to Computerized Legal Software
BL 9.1	BL 57	Legal Document Production
BL 10	BL 112	Estate Planning for the Paralegal
BL 11	BL 113	Fundamentals of Alternate Dispute Resolutions
BL 12	BL 114	Law on the Internet
BL 13	BL 115	Elder Law
BL 14	BL 105	Introduction to Federal and California Employment, Labors, and Workers' Compensation Law
BL 20	BL 120	Legal Ethics
BL 21	BL 1T	Legal-Computer Tutorial
BL 22	BL 220	Landlord and Tenant Law
BL 23	BL 230	Corporate Law
BL 24	BL 240	Tort Law
BL 25	BL 250	Legal Interviewing
BL 71	BL 171	Business Paralegal Occupational Work Experience
BL 72	BL 172	Business Paralegal Occupational Work Experience
BL 73	BL 173	Business Paralegal Occupational Work Experience
BL 74	BL 174	Business Paralegal Occupational Work Experience
BUSR 11	BUSR 101	Real Estate Principles
BUSR 12	BUSR 50	Introduction to Real Estate Software
BUSR 13	BUSR 1T	Business Real Estate Computer Tutorial
BUSR 15	BUSR 51	Real Estate Pre-License
BUSR 20	BUSR 120	Real Estate Finance
BUSR 21	BUSR 52	Mortgage Loan Brokering
BUSR 25	BUSR 125	Legal Aspects of Real Estate
BUSR 30	BUSR 130	Real Estate Practices
BUSR 31	BUSR 131	Introduction to Real Estate Appraisal
BUSR 32	BUSR 53	Advanced Real Estate Appraisal
BUSR 33	BUSR 54	Computers in Real Property Appraisal Practice
BUSR 40	BUSR 140	Real Estate Property Management
BUSR 41	BUSR 55	Real Estate Office Administration
BUSR 51	BUSR 151	Fundamentals of Escrow
BUSR 52	BUSR 56	Practices of Escrow
BUSR 60	BUSR 160	Real Estate Economics
BUSR 72	BUSR 172	Business Real Estate Occupational Work Experience/Career Internship
BUSR 73	BUSR 173	Business Real Estate Occupational Work Experience/Career Internship
BUSR 74	BUSR 174	Business Real Estate Occupational Work Experience/Career Internship
CHEM 1.1	CHEM 111	General Chemistry
CHEM 1.2	CHEM 112	General Chemistry
CHEM 2	CHEM 110	Elementary Chemistry
CHEM 5	CHEM 205	Quantitative Analysis Chemistry
CHEM 7.1	CHEM 211	Organic Chemistry
CHEM 7.2	CHEM 212	Organic Chemistry
CHEM 10	CHEM 100	Introductory Chemistry
CHEM 30.16	CHEM 250L	Special Topics in Chemistry
CHEM 99	CHEM 9T	Chemistry Tutorial
CD 10	CD 110	Child Development
CD 21	CD 50	Arts and Crafts for School-Age Children
CD 24	CD 124	The Child in a Pluralistic Society
CD 37	CD 137	Positive Child Guidance
CD 38	CD 138	Observation and Assessment of Childhood Behavior
CDEC 10	CDEC 111	Principles and Practices in Early Childhood Education
CDEC 20	CDEC 112	Early Childhood Education Curriculum
CDEC 21	CDEC 113	The Child, Family, and Community
CDEC 25	CDEC 61	Nutrition, Health and Safety in Children's Programs
CDEC 30	CDEC 62	Creativity and the Pre-School Child
CDEC 32	CDEC 63	Early Childhood Experiences in Language Arts and Social Sciences
CDEC 33	CDEC 133	Early Childhood Experiences in Mathematics and Science
CDEC 35	CDEC 64	Early Childhood Education Practicum
CDEC 40	CDEC 65	Music and Movement for Young Children
CDEC 50	CDEC 66	Administration and Supervision of Early Childhood Education Programs
CDEC 51	CDEC 67	Advanced Administration and Supervision of Early Childhood Education Programs
CDEC 52	CDEC 230	Adult Supervision in Child Care Programs
CDEC 73	CDEC 173	Early Childhood Education Occupational Work Experience
CDEC 74	CDEC 174	Early Childhood Education Occupational Work Experience
CDFC 10	CDFC 10	Family Child Care Providers
CDIA 10	CDIA 90	Introduction to Elementary and Secondary Classroom Experiences
CDIA 20	CDIA 91	The Child in the Elementary and Secondary School Environment

OLD NO.	NEW NO.	COURSE TITLE
CDIA 35	CDIA 99	Instructional Aide Practicum
CDIA 73	CDIA 73	Instructional Aide Occupational Work Experience
CDIA 74	CDIA 74	Instructional Aide Occupational Work Experience
CDIT 10	CDIT 50	Infant/Toddler Care Giving
CDSA 10	CDSA 152	School-Age Child Care Supervision and Administration
CDSA 20	CDSA 155	School-Age Child Care Activities
CDSA 35	CDSA 259	School-Age Child Care Practicum
CDPE 10	CDPE 10	Introduction to Family Development
CDSE 10	CDSE 50	Survey of Special Education
CDSE 35	CDSE 51	Special Education Environment
CDSE 73	CDSE 73	Special Education Assistant Occupational Work Experience
CDSE 74	CDSE 74	Special Education Assistant Occupational Work Experience
CNC -MTT 1	MTT 100	Machine Tool Introduction
CNC -MTT 3	MTT 60	Advanced Machine Tool Concepts
CNC -MTT 5	MTT 62	Fixture Tooling
CNC - MTT 7	MTT 56	CNC Shop Inspection
CNC -MTT 9	MTT 50	CNC Shop Math
CNC -MTT 11	MTT 170	Computer Numerical Control Programming
CNC -MTT 15	MTT 54	CNC Blueprint Reading
CNC -MTT 17	MTT 52	Set Up and Operation of CNC Machinery
MTT 18	MTT 53L	Machinist Laboratory
MTT 19	MTT 55	Supplemental Machine Shop Studies
CNC-MTT 21	MTT 172	Parts Programming
CNC -MTT 46	MTT 1L	Numerical Control Specialty
CNC -MTT 52	MTT 51	CAD/CAM Introduction
CNC -MTT 53	MTT 76	CAD/CAM Virtual Gibbs
CNC -MTT 54	MTT 154	Shop Floor Communications and Post Processing
CNC -MTT 55	MTT 278	CAD/CAM Advanced
CNC-MTT 62	MTT 80	CAD/CAM Mold Machining
CPSC 80	CIS 178	Programming in Fortran
CPSC 82	CIS 230	Assembly Programming for Microcomputers
CPSC 87	CIS 177	Programming in Pascal
CPSC 89	CIS 292	Data Structures
COS 12	COS 50	Introductory Cosmetology
COS 15.1	COS 70A	Introductory Cosmetology
COS 15.2	COS 70B	Intermediate Cosmetology
COS 15.3	COS 70C	Advanced Cosmetology Manipulation
COS 22	COS 51	Intermediate Cosmetology
COS 23.1	COS 71A	Introductory Cosmetology
COS 23.2	COS 71B	Intermediate Cosmetology
COS 23.3	COS 71C	Advanced Cosmetology I
COS 32	COS 52	Advanced Cosmetology
COS 34.1	COS 53	Advanced Cosmetology Manipulation
COS 41	COS 60A	Introductory Cosmetology I
COS 42	COS 60B	Introductory Cosmetology II
COS 43	COS 61A	Intermediate Cosmetology I
COS 44	COS 61B	Intermediate Cosmetology II
COS 45	COS 62A	Advanced Cosmetology I
COS 46	COS 62B	Advanced Cosmetology II
COS 50	COS 1	Cosmetology Salon Preparation
COS 83	COS 54	Introductory Esthetician
COS 84	COS 54A	Advanced Esthetician
CG 2	CG 1	Career Planning
CG 3	CG 50	Orientation and Educational Planning
CG 4	CG 2	Self Awareness Towards Educational Readiness
CG 7	CG 3	Orientation for the Student with Disabilities
CG 8	CG 4	Career Exploration for the Student with Disabilities
CG 9	CG 5	Personal Assessment for the Student with Disabilities
CG 10	CG 100	Counselor Aide in the Community College
CG 11	CG 6	Family Living for the Student with Disabilities
CG 20	CG 200	Success in College and Career
CG 21	CG 210	Job Search Strategies
CA 1	CA 101	Introduction to Food Services, Safety & Sanitation
CA 1.5	CA 15	Certification for Food Handlers
CA 2	CA 52	Food Production
CA 3	CA 53	Commercial Food Production: Pantry Items
CA 4	CA 54	Commercial Food Production: Meats & Poultry
CA 5	CA 50	Dining Room Service
CA 5.1	CA 50A	Dining Room Management
CA 6	CA 60	Foods Purchase and Control
CA 10	CA 80	Introduction to Baking Skills
CA 11	CA 81	Professional Baking and Pastry Production I
CA 12	CA 82	Professional Baking and Pastry Production II
CA 13	CA 85	Advanced Professional Pastry Design and Decorating
	CA 120	Introduction to Hospitality
CA 73	CA 43	Occupational Work Experience
CA 74	CA 44	Occupational Work Experience
DA 40	DA 1	Dental Radiation Safety Licensing
DA 51	DA 51	Applied Dental Science I
DA 52	DA 52	Dental Radiography I
DA 53	DA 53	Introduction to Chairside Assisting
DA 54	DA 54	Introduction to Operatory Procedures
DA 61	DA 61	Applied Dental Science II
DA 62	DA 62	Dental Radiography II
DA 63	DA 63	Advanced Chairside Assisting
DA 64	DA 64	Dental Office Management
DA 65	DA 65	Clinical I Dental Schools
DA 75	DA 75	Clinical II Cooperative Office Training
DH 10	DH 110	Preventive Dentistry I
DH 11	DH 111	Infection Control and Dental Office Emergencies

OLD NO.	NEW NO.	COURSE TITLE
DH 12	DA 112	Dental Hygiene Radiography
DH 14	DH 114	Dental Hygiene Clinical Sciences I
DH 15	DH 115C	Pre-Clinical Dental Hygiene I
DH 16	DH 116	Head and Neck Anatomy
DH 19	DH 119	Dental Embryology, Histology, and Anatomy
DH 20	DH 120	Preventive Dentistry II
DH 25	DH 125C	Clinical Dental Hygiene II
DH 25.1	DH 125	Dental Hygiene Clinical Sciences II
DH 25.2	DH 150	Clinical Dental Hygiene IIA
DH 26	DH 126	General and Oral Pathology
DH 27	DH 127	Pharmacology
DH 28	DH 128	Management of Pain
DH 29	DH 129	Applied Periodontics
DH 32	DH 232L	Dental Materials Laboratory
DH 34	DH 234	Dental Care for the Special Patient
DH 35	DH 235C	Clinical Dental Hygiene III
DH 35.1	DH 235	Dental Hygiene Clinical Sciences III
DH 38	DH 238	Community Dental Health Laboratory I
DH 39	DH 239	Dental Health Education and Research I
DH 44	DH 244	Ethical Issues in Dental Hygiene
DH 45	DH 245C	Clinical Dental Hygiene IV
DH 45.1	DH 245	Dental Hygiene Clinical Sciences IV
DH 48	DH 248L	Community Dental Health Laboratory
DH 49	DH 249	Dental Health Education and Research II
DH 55	DH 250	Clinical Dental Hygiene V
DRAF 16	DRAF 16	Blueprint Reading for Machine Trades
DRAF 17	DRAFT 117	Geometrical Dimensioning and Tolerancing
DRAF 31	DRAF 131	Fundamentals of Drafting Including AutoCad
DRAF 33	DRAF 133	Sheet Metal Layout and Applications
DRAF 37	DRAF 237	Graphical Statistics and Strength of Materials
DRAF 38	DRAF 138	Fundamentals of Computer Aided Drafting
DRAF 51	DRAF 51	Advanced Applications of Computer Aided Drafting and Design Using AutoCad
DRAF 53	DRAF 153	Machine Drawing and Design with AutoCad
DRAF 54	DRAF 254	AutoCad Solid Modeling and 3D
DRAF 55	DRAF 55	AutoCad Rendering and Solid Modeling Applications
DRAF 56	DRAF 56	Introduction to Auto CAD Mechanical Desktop
DRAF 57	DRAF 57	Advanced Applications of AutoCAD Mechanical Desktop
DRAF 58	DRAF 258	Design and Production Technology
ESCI 1	ESCI 101	Physical Ecology
ESCI 1.1	ESCI 101L	Physical Ecology Field Laboratory
ESCI 4	ESCI 104	Oceanography
ESCI 6	ESCI 106	Weather and Climate
ESCI 10	ESCI 110	Introduction to Earth Science
ESCI 20.16	ESCI 180	Earth Science Materials and Preparations
ECON 1.1	ECON 202	Principles
ECON 1.2	ECON 201	Principles
ECON 3	ECON 101	U.S. & Global Economy
ECON 4	ECON 204	Money, Ethics, and Economic Justice
EDT 52	EDT 1	Windows for Educators
EDT 53	EDT 2	Macintosh for Educators
EDT 54	EDT 3	Integration of the Internet to the Curriculum Part I - Introduction
EDT 55	EDT 4	Integration of the Internet to the Curriculum Part 2 - Advanced
EDT 56	EDT 5	Integration of the Internet to the Curriculum Part 3 - Curriculum
EDT 57	EDT 6	E-mail for Educators
EDT 61	EDT 7	Word for Educators I
EDT 62	EDT 8	Word for Educators II
EDT 66	EDT 9	PowerPoint for Educators I
EDT 67	EDT 10	PowerPoint for Educators II
EDT 70	EDT 11	Excel Spreadsheets for Educators
EDT 71	EDT 12	Access for Educators
EDT 73	EDT 43	Educational Occupation/Work Experience
EDT 75	EDT 14	Web Design for Educators
EDT 85	EDT 15	Educational Hardware/Software Eval
EDT 86	EDT 16	Fundamentals of Online Courses
EDT 88	EDT 17	Computer Integration in Educators
EDT 89	EDT 18	Desktop Publishing for Educators
EDT 90	EDT 19	Fundamentals of Teleconferencing
EDT 91	EDT 20	Teleconferencing for Small Groups
EDT 92	EDT 21	Teleconferencing Telematics
EDT 93	EDT 22	Telecon Review and Eval
EDT 94	EDT 23	Teleconference Production
EDT 95	EDT 24	Teleconference Portfolio
EL 1	EL 100	Basic Electronics
EL 10	EL 110	Principles of DC Electronics
EL 10.1	EL 110L	DC Electronics Laboratory
EL 14	EL 114	Fundamentals of Digital Electronics
EL 14.1	EL 114L	Fundamentals of Digital Electronics Lab
EL 15	EL 60	Computer Aided Circuit Analysis
EL 16	EL 56	Programmable Logic Controllers
EL 18	EL 50	Electronic Tests and Measurements
EL 19	EL 66	Fundamentals of Electricity
EL 20	EL 120	Principles of AC Electronics
EL 20.1	EL 120L	AC Electronics Laboratory
EL 24	EL 124	Advanced Digital Electronics
EL 24.1	EL 124L	Advanced Digital Electronics Laboratory
EL 30	EL 200	Semi-Conductor Circuits
EL 30.1	EL 200L	Semi-Conductor Circuits Laboratory
EL 33	EL 202	Radio and TV Theory and Servicing
EL 34	EL 134	Digital Circuits and Computer Logic
EL 35	EL 205	Bio-Medical Electronics
EL 37	EL 37L	Service and Repair Lab
EL 40	EL 210	Electronic Systems Analysis
EL 40.1	EL 210L	Systems Analysis Laboratory
EL 41	EL 220	Linear Integrated Circuits
EL 41.1	EL 220L	Linear Integrated Circuits Laboratory

OLD NO.	NEW NO.	COURSE TITLE
EL 42	EL 212	Electronic Communications
EL 42.1	EL 212L	Electronic Communications Lab
EL 43	EL 222	Advanced Radio and TV Servicing
EL 44	EL 244	Introduction to Microcomputers
EL 44.1	EL 53A	Introduction to Microprocessors
EL 44.2	EL 53B	Advanced Microprocessors
EL 45	EL 215	Bio-Medical Instruments
EL 46	EL 76	Industrial Electronic Control
EL 47	EL 52	Basic VCR Servicing
EL 51	EL 62	Optoelectronics
EL 54	EL 54	Microcomputer Repair Fundamentals
EL 55	EL 96A	Introduction to Automated Manufacturing (Robotics)
EL 56	EL 96B	Automated Manufacturing (Advanced Robotics)
EL 64.1	EL 64A	Fundamentals of Telecommunication Electronics
EL 64.2	EL 64B	Advanced Telecommunication Electronics
EL 73	EL 43	Electronics Occupational Work Experience
EL 74	EL 44	Electronics Occupational Work Experience
EL 86	EL 86	Electric Motor Control
EL 94	EL 94	Introduction to Digital Signal Processing
ENGY 10	ENGY 110	Energy and the Way We Live
ENGR 12	ENGR 112	Engineering Graphics
ENGR 15	ENGR 115	Engineering Electric Circuits
ENGR 23	ENGR 123	Descriptive Geometry
ENGR 35	ENGR 135	Statics
ENGL 1	ENGL 100	Freshman Composition
ENGL 2	ENGL 102	Freshman Composition and Literature
ENGL 3	ENGL 103	Critical and Argumentative Writing
ENGL 5	ENGL 155	Technical Writing
ENGL 6	ENGL 106	Introduction to Language Study
ENGL 7	ENGL 107	Vocabulary Building
ENGL 8	ENGL 108	Vocabulary Building for Professionals
ENGL 11	ENGL 50A	English Grammar
ENGL 11.1	ENGL 30	Grammar Basics
ENGL 11.5	ENGL 50B	Advanced Grammar
ENGL 12	ENGL 53	Punctuation, Capitalization and Spelling
ENGL 12.1	ENGL 31	Punctuation Basics
ENGL 21.1	ENGL 221A	Literature in the Bible: Hebrew Scriptures
ENGL 21.2	ENGL 221B	Literature in the Bible: Christian Scriptures
ENGL 22	ENGL 222	Children's Literature
ENGL 23	ENGL 223	Chicana/o Literature
ENGL 24	ENGL 224	Native American Literature
ENGL 25	ENGL 225	Mexican Literature in Translation
ENGL 26	ENGL 226	African American Literature
ENGL 27	ENGL 227	Current Literature
ENGL 28	ENGL 228	Shakespeare's Plays
ENGL 29	ENGL 229	Autobiographical Literature/Writing
ENGL 30.1	ENGL 230A	Introduction to American Literature
ENGL 30.2	ENGL230B	Introduction to American Literature
ENGL 32	ENGL 232	Readings in Poetry
ENGL 33	ENGL 233	Readings in the Novel
ENGL 34	ENGL 234	Readings in the Short Fiction
ENGL 35	ENGL 235	Readings in the Drama
ENGL 37	ENGL 237	Asian American Literature
ENGL 40	ENGL 240	Creative Writing
ENGL 41	ENGL 241	Script Writing for Television and Motion Pictures
ENGL 46.1	ENGL 246A	Survey of English Literature
ENGL 46.2	ENGL 246B	Survey of English Literature
ENGL 48.1	ENGL 248A	Masterpieces of World Literature
ENGL 48.2	ENGL 248B	Masterpieces of World Literature
ENGL 50.1	ENGL 20	Basic Writing
ENGL 50.2	ENGL 52	Introduction to College Composition
ENGL 64	ENGL 32	Spelling
ENGL 64.1	ENGL 22	Spelling Basics
ENGL 66	ENGL 33	Individualized English
ENGL 99	ENGL 10	Introduction to Computerized Writing
ESL 1	ESL 2	Intermediate Skills for the ESL Students
ESL 2	ESL 3	Advanced Intermediate Skills for the ESL Student
ESL 3.1	ESL 100	ESL Writing and Structure
ESL 3.2	ESL 10	ESL Speaking and Listening
ESL 4.1	ESL 200	ESL Writing and Structure
ESL 4.2	ESL 20	ESL Speaking and Listening
ESL 11	ESL 11	ESL Fundamental Reading Skills
ESL 12	ESL 12	ESL Pronunciation
ESL 21.1	ESL 21A	ESL Intermediate Vocabulary
ESL 21.2	ESL 21B	ESL Advanced Vocabulary
ESL 22	ESL 22	ESL Oral Communication
ESL 23	ESL 23	ESL Spelling
ESL 31	ESL 31	ESL Reading
ESL 32	ESL 32	American Expressions and Culture
ESL 33	ESL 33	English for Specific Purposes
ESL 34	ESL 34	Study Skills
ESL 35	ESL 35	Editing for Advanced Grammar and Syntax
ESL 60	ESL 1	English as a Second Language Introduction
ESL 70	ESL 4	Sheltered English as a Second Language/American
ESL 99	ESL 47T	ESL Tutorial
	ESL 14	Accent Reduction
FREN 1	FREN 101	Elementary French
FREN 2	FREN 102	Elementary French
FREN 3	FREN 201	Intermediate French
FREN 4	FREN 202	Intermediate French
FREN 5	FREN 203	Intermediate French Advanced Level 1
FREN 8.1	FREN 281	Beginning Conversational French
FREN 8.2	FREN 282	Intermediate Conversational French

OLD NO.	NEW NO.	COURSE TITLE
FREN 8.3	FREN 283	Advanced Conversational French
GEOG 1	GEOG 101	Physical Geography
GEOG 2	GEOG 102	Natural and Cultural Geography
GEOG 5	GEOG 105	World Regional Geography
GEOG 10	GEOG 106	Introduction to Geographic Information Systems
GEOG 16	GEOG 257	Vietnam: Country and War
GEOL 1	GEOL 101	The Earth Environment
GEOL 3	GEOL 201	Earth History
GEOL 4	GEOL 204	Geology of the Western National Parks and Monuments
GEOL 7	GEOL 207	Paleontology, Life of the Past
GEOL 9	GEOL 209	Earthquakes and Volcanos
GEOL 10	GEOL 110	Introduction to Geology
GEOL 16	GEOL 100	Natural History of So. California
GERM 1	GERM 101	Elementary German
GERM 2	GERM 102	Elementary German
GERM 3	GERM 201	Intermediate German
GERM 4	GERM 202	Intermediate German
GERM 5	GERM 203	Scientific German
GERM 6	GERM 204	Scientific German
GERM 8.1	GERM 281	Beginning Conversational German
GERM 8.2	GERM 282	Intermediate Conversational German
GERM 8.3	GERM 283	Advanced Conversational German
GERM 9.1	GERM 291	German for International Commerce
GERM 9.2	GERM 292	German for International Commerce
HED 8	HED 100	Contemporary Health Problems
HED 9	HED 110	Community First Aid and CPR
HO 9	HO 9	Emergency Medical Technician I
HO 9.1	HO 9L	Emergency Medical Technician I Lab
HO 10	HO 53	Electrocardiograph
HO 11	HO 54	Medical Laboratory Skills
HO 12	HO 55	Phlebotomy Procedures
HO 32	HO 50	Emergency and Safety Management
HO 51	HO 151	Elements of Nutrition
HO 52	HO 152	Nutrition
	HO 236	Life Span/Health Issues I
	HO 237	Life Span/Health Issues 2
HIST 4.1	HIST 240	Western Civilization
HIST 4.2	HIST 241	Western Civilization
HIST 5	HIST 250	History of England, Great Britain and the Commonwealth
HIST 6.1	HIST 245	World Civilization from Antiquity to 1500
HIST 7.1	HIST 201	Political and Social History of the United States
HIST 7.2	HIST 202	Political and Social History of the United States
HIST 8.1	HIST 220	History of the Americas
HIST 8.2	HIST 221	History of the Americas
HIST 10	HIST 210	History of the United States in the Post World War II Era
HIST 16	HIST 257	Vietnam: Country and War
HIST 18	HIST 260	Survey of the History of Asia
HIST 19	HIST 265	Selected Problems in Contemporary Asian History
HIST 20	HIST 255	History of Russia and the Soviet Union
HIST 27	HIST 101	American History and Constitution
HIST 31	HIST 230	History of Mexico
HIST 35	HIST 110	African-American History
HIST 39	HIST 120	History of California
HIST 50	HIST 270	Special Topics in History
HUM 1	HUM 100	The Art of Begin Human
HUM 3	HUM 103	Humanities Through the Arts
HUM 4	HUM 104	Science, Literature and Human Insight
HUM 5	HUM 105	Encounters with Living Faiths
IA 20	IA 20A	Survey of Automated Manufacturing for Non-technical Personnel
JAPN 1	JAPN 101	Elementary Japanese
JAPN 2	JAPN 102	Elementary Japanese
JAPN 3	JAPN 201	Intermediate Japanese
JAPN 4	JAPN 202	Intermediate Japanese
JAPN 8.1	JAPN 281	Beginning Conversational Japanese
JAPN 8.2	JAPN 282	Intermediate Conversational Japanese
JAPN 8.3	JAPN 283	Advanced Conversational Japanese
JOUR 18	JOUR 100	Introduction to Mass Communications
JOUR 20	JOUR 101	Beginning News Writing and Reporting
JOUR 21	JOUR 201	Advanced Reporting and Editing
JOUR 22	JOUR 220	Feature Article Writing
JOUR 23	JOUR 110	Principles of Public Relations
JOUR 25	JOUR 225	Magazine Editing and Design
JOUR 26	JOUR 120	Internet for Journalists
JOUR 32	JOUR 130	Photo Journalism
JOUR 53	JOUR 103	Newspaper Article Writing
JOUR 54	JOUR 104	Summer Newspaper Article Writing
JOUR 55	JOUR 105	Newspaper Production
JOUR 56	JOUR 106	Summer Newspaper Production
JOUR 59	JOUR 50L	Editorial Board
JOUR 60	JOUR 160L	College Magazine Production
JOUR 70	JOUR 170	Broadcast News
LIBR 10	LIBR 100	Introduction to Library Resources
MMP 21	MMP 50	Fundamentals of Machine Moldmaking
MMP 31	MMP 51	Injection and Extrusion Molds
MMP 32	MMP 52	Compression, Transfer and Vacuum Forming Molds
MFGT 5	MFGT 100	Manufacturing Processes
MFGT 10	MFGT 60	Quality Assurance Principles
MFGT 11	MFGT 55	Quality Control (QC)
MFGT 30	MFGT 50	Survey of Hazardous Materials Technology
MFGT 14	MFGT 53	Statistical Process Control (SPC)
MFGT 36	MFGT 54	Ultrasonic Level Testing
MFGT 46	MFGT 51	Introduction to Computer Integrated Manufacturing
MFGT 50	MFGT 52	Introduction to Laser Cutting Technology
MFGT 73	MFGT 43	Manufacturing Technology Occupational Work Experience
MFGT 74	MFGT 44	Manufacturing Technology Occupational Work Experience

OLD NO.	NEW NO.	COURSE TITLE
	MFGT 56	ISO 900 Quality Standards
	MFGT 57	Total Quality Management (TQM)
	MFGT 58	Benchmaking
	MFGT 59	Design of Experiments (DOE)
MATH 5.1	MATH 101	Precalculus Mathematics
MATH 5.2	MATH 102	Analytic Geometry and Calculus I
MATH 5.3	MATH 103	Analytic Geometry and Calculus II
MATH 5.4	MATH 220	Analytic Geometry and Calculus III
MATH 5.5	MATH 240	Calculus and Differential Equations
MATH 6.1	MATH 110A	Mathematics for Elementary Teachers
MATH 6.2	MATH 110B	Mathematics for Elementary Teachers
MATH 10	MATH 100	Liberal Arts Mathematics
MATH 12	MATH 112	Elementary Statistics
MATH 15	MATH 115	Finite Mathematics
MATH 16	MATH 116	Calculus for Managerial, Biological and Social Sciences
MATH 17	MATH 114	College Algebra
MATH 21	MATH 140	Trigonometry
MATH 23	MATH 80	Intermediate Algebra
MATH 23.1	MATH 80A	Intermediate Algebra I
MATH 23.2	MATH 80B	Intermediate Algebra II
MATH 30	MATH 60	Elementary Algebra
MATH 32	MATH 70	Plane Geometry
MATH 40	MATH 40	Survey of Mathematics
MATH 42	MATH 42	Foundations in Applied Mathematics
MATH 50	MATH 20	Basic Mathematics
MATH 75.1	MATH 150A	Computer Applications for Precalculus
MATH 75.2	MATH 170A	Computer Applications for Calculus I
MATH 75.3	MATH 190A	Computer Applications for Calculus II
MA 40	MA 60	Introduction to Medical Assisting
MA 41	MA 161	Medical Terminology
MA 42	MA 62	Medical Insurance and Liability
MA 44	MA 64	Medical Office Assisting
MA 46	MA 66	Medications and Specialties
MA 47	MA 67	Medical Office Administration
MA 48	MA 68	Medical Assisting Internship Experience
MA 73	MA 73	Medical Assistant Occupational Work Experience
MA 74	MA 74	Medical Assistant Occupational Work Experience
MET 10	MET 100A	Metallurgy I
MET 12	MET 100B	Metallurgy II
MET 19	MET 52L	Metallurgy Specialty Lab
MET 21	MET 53	Ferrous Metallurgy
MET 22	MET 54	Nonferrous Metallurgy
MET 31	MET 55	Laboratory Procedures
MET 38	MET 120	Non-Destructive Testing
MET 41	MET 56	Survey of Nonferrous Heat Treat
MET 42.1	MET 130A	Heat Treatment of Iron and Steel
MET 42	MET 50	Nonferrous Heat Threat
MET 42.3	MET 50A	Heat Treating Ferrous Materials
MET 48	MET 51	Welding Metallurgy
MET 73	MET 73	Metallurgy Occupational Work Experience
MET 74	MET 74	Metallurgy Occupational Work Experience
MICR 1	MICR 200	Principles and Applications of Microbiology
MUS 3	MUS 102	Latino Music
MUS 4	MUS 103	Jazz in America
MUS 5	MUS 104	American Popular Music
MUS 7	MUS 100	Music Appreciation
MUS 9	MUS 1L	Music Laboratory
MUS 10	MUS 105	Music Fundamentals
MUS 11	MUS 106	Music Theory/Musicianship I
MUS 12	MUS 107	Music Theory/Musicianship II
MUS 13	MUS 108	Music Theory/Musicianship III
MUS 14	MUS 110	Music Theory/Musicianship IV
MUS 22	MUS 144	Electronic Synthesizer I
MUS 23	MUS 145	Electronic Synthesizer II
MUS 24	MUS 146	Recording Techniques
MUS 25	MUS 111	Music Notation and Copying
MUS 30	MUS 147	Basic Applied Music
MUS 31	MUS 148	Private Study/Recital I
MUS 32	MUS 149	Private Study/Recital II
MUS 33	MUS 150	Private Study/Recital III
MUS 34	MUS 151	Private Study/Recital IV
MUS 35	MUS 135	This Business of Music
MUS 36	MUS 143	The Jazz and Popular Singer
MUS 40	MUS 116	Voice I
MUS 41	MUS 117	Voice II
MUS 42	MUS 118	Voice III
MUS 43	MUS 119	Voice IV
MUS 47	MUS 142	Jazz Improvisation
MUS 48	MUS 2	Commercial Music Orientation
MUS 60	MUS 112	Elementary Piano I
MUS 61	MUS 113	Elementary Piano II
MUS 62	MUS 114	Intermediate Piano I
MUS 63	MUS 115	Intermediate Piano II
MUS 65	MUS 120	Elementary Guitar I
MUS 66	MUS 121	Elementary Guitar II
MUS 67	MUS 122	Intermediate Guitar I
MUS 68	MUS 123	Intermediate Guitar II
MUS 70	MUS 124	Concert Band
MUS 71	MUS 125	Community Symphonic Band
MUS 72	MUS 126	Pep Band
MUS 73	MUS 127	Orchestra
MUS 73.1	MUS 128	Community Orchestra
MUS 74	MUS 129	Woodwind Ensemble
MUS 75	MUS 130	Brass Ensemble
MUS 76	MUS 131	Percussion Ensemble
MUS 77	MUS 132	Guitar Ensemble
MUS 78	MUS 133	Stage Band
MUS 79	MUS 134	Jazz Ensemble
MUS 80	MUS 136	String Ensemble
MUS 82	MUS 138	Community Chorus
MUS 83	MUS 139	College Chorus
MUS 89	MUS 140	Pop Choir
MUS 91	MUS 141	Pop/Rock Ensemble
	MUS 104B	History of Rock Music
NRSG 1.3	NRSG 207	Medical - Surgical Nursing 3

OLD NO.	NEW NO.	COURSE TITLE
NRSG 1.4	NRSG 208	Maternal/Child Nursing
NRSG 1.5	NRSG 215	Advanced Placement Bridge
NRSG 2.1	NRSG 219	Medical-Surgical Nursing 4
NRSG 2.2	NRSG 218	Psychosocial and Community Nursing
NRSG 2.3	NRSG 270	Medical - Surgical Nursing 5
NRSG 2.4	NRSG 280	Professional Role Transition
NRSG 3	NRSG 3	Preparing for Nursing
NRSG 4	HO 56	Medication Calculations for Nurses
NRSG 6	NRSG 251	Basic Adult Physical Assessment
NRSG 20	NRSG 200	Pharmacology for Nurses
NRSG 47	NRSG 47T	Supervised Nursing - Tutorial
	NRSG 25	Clinical Workshop I
	NRSG 26	Clinical Workshop 2
	NRSG 210	Fundamentals of Nursing
	NRSG 211	Introduction to Theoretical Framework
	NRSG 212	Medical - Surgical Nursing1
	NRSG 213	Survey of Pharmacology
	NRSG 214	Medical - Surgical Nursing 2
NTO 5.1	CIS 70A	Networking Fundamentals
NTO 5.2	CIS 70B	Local Area Networks
NTO 5.3	CIS 70C	Wide Area Networks
NTO 5.4	CIS 70D	Networking Architectures
NTO 5.6	CIS 70E	Internetworking
NTO 5.7	CIS 70F	Networking Protocols
NTO 5.8	CIS 70H	Networking Analysis and Design
ORNH 10	ORNH 100	Introduction to Ornamental Horticulture
ORNH 10.5	ORNH 1	Landscape - Gardener Training
ORNH 11	ORNH 110	Soils
ORNH 12	ORNH 120	Ornamental Trees
ORNH 13	ORNH 130	Ornamental Shrubs
ORNH 14	ORNH 140	Plant Propagation
ORNH 15	ORNH 150	Turf Grass Management and Ground Covers
ORNH 16	ORNH 160	Insects and Weeds
ORNH 18	ORNH 180	Basic Landscape Design
ORNH 19	ORNH 190	Nursery Management and Operations
ORNH 20	ORNH 50	Basic Landscape Irrigation
ORNH 21	ORNH 51	Advance Landscape Irrigation
ORNH 22	ORNH 52	Residential Landscape Design
ORNH 23	ORNH 53	Commercial Landscape Design
ORNH 24	ORNH 54	Landscape Contracting/Management
ORNH 25	ORNH 55	Landscape Contracting/Operations
ORNH 26	ORNH 56	Plant Disease Concepts
ORNH 27	ORNH 57	Plant Disease Management
ORNH 28	ORNH 2	Bonsai
ORNH 29	ORNH 3	Advanced Bonsai
ORNH 30	ORNH 58	Interior Plantscapes: House Plants
ORNH 31	ORNH 59	Basic Floral Design
ORNH 32	ORNH 60	Advanced Floral Design
ORNH 33.1	ORNH 61A	Special Occasions Floral Design I
ORNH 33.2	ORNH 61B	Special Occasions Floral Design II
ORNH 33.3	ORNH 4A	Advanced Special Occasions Floral Design III
ORNH 33.4	ORNH 4B	Advanced Special Occasions Floral Design IV
ORNH 34	ORNH 62A	Wedding Floral Design
ORNH 34.1	ORNH 62B	Wedding Floral Design I
ORNH 34.2	ORNH 62C	Wedding Floral Design II
ORNH 35	ORNH 63	Integrated Floral Design
ORNH 36	ORNH 64	Floral Design for Funerals
ORNH 40	ORNH 65	Tree Maintenance I
ORNH 41	ORNH 66	Tree Maintenance II
ORNH 42	ORNH 67	Landscape Design Rendering
ORNH 43	ORNH 68	Landscape Planting Design
PHAR 4	PHAR 40L	Pharmacy Clerk Lab
PHAR 5	PHAR 45	Retail Products for Pharmacy Clerks
PHAR 10	PHAR 60	Introduction to Pharmacy
PHAR 10.1	PHAR 61	Pharmacy Skills Development
PHAR 11	PHAR 62	Pharmacy Operations I
PHAR 12	PHAR 50	Pharmaceutics
PHAR 13	PHAR 63	Pharmacy Operations II
PHAR 14	PHAR 64	Pharmacy Operations III
PHAR 15	PHAR 81	Over-the-Counter Products
PHAR 21	PHAR 83	Pharmacy Technician Pharmacology I
PHAR 22	PHAR 85	Pharmacy Technician Pharmacology II
PHAR 31	PHAR 90	Clinical Experience I
PHAR 41	PHAR 95	Clinical Experience II
PHAR 73	PHAR 173	Pharmacy Technician Occupational Work Experience
PHAR 74	PHAR 174	Pharmacy Technician Occupational Work Experience
PHAR 6	PHAR 47	Pharmacy Clerk Clinical Experience
PHIL 5	PHIL 100	Introduction to Philosophy
PHIL 6	PHIL 102	Introduction to Ethics
PHIL 7	PHIL 200	World Religions
PHIL 8	PHIL 104	Philosophy of Cultural Diversity: Challenge and Change
PHIL 9	PHIL 201	Introduction to Twentieth Century Philosophy
PHIL 11	PHIL 202	Critical Thinking and Argumentative Writing
PHIL 12	PHIL 106	Introduction to Logic
PHIL 15	PHIL 204	Philosophy of Bible I (Hebrew Scriptures)
PHIL 16	PHIL 206	Philosophy of the Bible II (Christian Scriptures)
PHOT 28	PHOT 120	Introduction to Photography - Color Slides
PHOT 29	PHOT 100	Introductory Photography
PHOT 30	PHOT 102	Intermediate Photography
PHOT 31	PHOT 200	Advanced Photography
PHOT 34	PHOT 122	Introduction to Color Photography
PHOT 35	PHOT 124	Intermediate Color Photography
PHOT 36	PHOT 240	Experimental Photography
PHOT 37	PHOT 250	Contemporary Photographic Expression
PHOT 38	PHOT 234	Portfolio Development
PHOT 39	PHOT 242	Non-Silver Photography
PHOT 40	PHOT 160	History of Photography
PHOT 41	PHOT 230	Portrait Photography
PHOT 42	PHOT 220	Advanced Color Photography
PHOT 44	PHOT 232	Studio Problems in Photography

OLD NO.	NEW NO.	COURSE TITLE
PHOT 46	PHOT 252	Photography of the Natural Environment
PHOT 92	PHOT 110	Introduction to Digital Imaging
PHOT 93	PHOT 112	Intermediate Digital Photography
PE 1	PE 100	Introduction to Physical Education
PE 2.1	PE 101	Sports Officiating for Men's Activities I
PE 2.2	PE 102	Sports Officiating for Men's Activities II
PE 3.1	PE 103	Sports Officiating for Women's Activities I
PE 3.2	PE 104	Sports Officiating for Women's Activities II
PE 4	PE 105	Student Athletes in Society
PE 5	PE 106	Creative Movement for Children
PE 7.1	PE 107	Introduction to Athletic Training
PE 10.1	PE 108	Professional Activities for Men's Sports I
PE 10.2	PE 110	Professional Activities for Men's Sports II
PE 10.3	PE 111	Professional Activities for Men's Sports III
PE 10.4	PE 112	Theory of Football
PE 12.1	PE 113	Professional Activities for Co-Ed Sports I
PE 12.2	PE 114	Professional Activities for Co-Ed Sports II
PE 12.4	PE 115	Professional Activities for Co-Ed Dance Fundamentals III
PE 12.5	PE 116	Professional Activities for Modern Dance
PE 14.1	PE 117	Professional Activities for Women's Sports I
PE 14.2	PE 118	Professional Activities for Women's Sports II
PE 14.3	PE 119	Professional Activities for Women's Sports III
PE 20.1	PE 150A	Swimming, Beginning
PE 20.3	PE 150B	Swimming, Intermediate/Advanced
PE 20.7	PE 170	Water Polo
PE 21.2	PE 125	Water Safety Instructor (WSI)
PE 30.2	PE 130	Stretching and Relaxation
PE 30.3	PE 138	Yoga
PE 30.4	PE 131	Walking for Fitness
PE 30.5	PE 140	Fitness and Wellness
PE 30.6	PE 141	Fitness and Wellness
PE 30.7	PE 142	Fitness and Wellness for Older Adults
PE 30.8	PE 143	Personal Fitness Program
PE 30.9	PE 144L	Exercise Physiology Laboratory Techniques
PE 31.1	PE 135A	Circuit Weight Training, Beginning
PE 31.4	PE 135B	Circuit Weight Training, Intermediate/ Advanced
PE 31.5	PE 234	Track and Field Conditioning
PE 31.6	PE 207	Cross Country Conditioning
PE 31.8	PE 151	Wrestling, Beginning
PE 32.1	PE 152	Tumbling and Stunts, Beginning
PE 33.1	PE 132A	Aerobic Activities (Low Impact)
PE 33.2	PE 132B	Aerobic Activities II
PE 33.3	PE 133	Step Aerobics
PE 33.4	PE 134	Water Aerobics
PE 40.4	PE 153A	Backpacking, Beginning
PE 40.6	PE 153B	Backpacking, Advanced
PE 40.7	PE 154A	Badminton, Beginning
PE 40.9	PE 154B	Badminton, Intermediate/Advanced
PE 40.13	PE 155A	Bowling, Beginning
PE 40.15	PE 155B	Bowling, Intermediate/Advanced
PE 40.16	PE 156A	Golf: Beginning
PE 40.17	PE 156C	Golf: Advanced Stroke Development and Course Play
PE 40.18	PE 156B	Golf: Intermediate/Advanced
PE 40.19	PE 157	Handball, Beginning
PE 40.25	PE 158A	Racquetball, Beginning
PE 40.27	PE 158B	Racquetball, Intermediate/ Advanced
PE 40.31	PE 171C	Slow-Pitch Softball
PE 40.32	PE 171A	Softball
PE 40.33	PE 171B	Softball, Intermediate/Advanced
PE 40.34	PE 159A	Tennis, Beginning
PE 40.36	PE 159B	Tennis, Intermediate/Advanced
PE 40.37	PE 172A	Volleyball, Beginning
PE 40.39	PE 172B	Volleyball, Intermediate/Advanced
PE 40.40	PE 236	Volleyball Pre-Season Conditioning
PE 40.41	PE 228	Tennis Conditioning
PE 40.42	PE 222	Softball Pre-Season Conditioning
PE 41.1	PE 211	Football Conditioning (Olympic Weights-Power Lifting)
PE 45	PE 180	Introduction to Dance Movement
PE 45.1	PE 181	Introduction to Dance Cultures of the World
PE 45.10	PE 182A	Dance, Modern, Beginning
PE 45.12	PE182B	Dance, Modern, Intermediate
PE 45.13	PE 183	Dance Production
PE 45.14	PE 184	Choreography
PE 45.15	PE 185	Partnering for Dance
PE 45.17	PE 186A	Beginning Ballet
PE 45.18	PE 186B	Intermediate Ballet
PE 46	PE 187	Dance Repertory
PE 46.1	PE 188	Dance Performance
PE 46.2	PE 189	Dance Workshop
PE 46.3	PE 190	Dance Notation
PE 46.4	PE 191	History of Dance
PE 46.5	PE 3	Individualized Dance Development
PE 50.1	PE 175A	Baseball, Beginning
PE 50.2	PE 201	Baseball Off-Season Conditioning
PE 50.3	PE 175B	Baseball, Intermediate/Advanced
PE 50.4	PE 176A	Basketball
PE 50.6	PE 176B	Basketball, Advanced
PE 50.10	PE 177	Flag Football for Women and Men
PE 50.11	PE 212	Football Training and Techniques
PE 50.12	PE 178	Football, Intermediate/Advanced
PE 50.13	PE 179A	Soccer, Beginning
PE 50.15	PE 179B	Soccer, Intermediate/Advanced
PE 60.4	PE 160	Self Defense for Women
PE 72	PE 200	Baseball
PE 73.1	PE 202	Basketball, Men
PE 73.2	PE 204	Basketball, Women

OLD NO.	NEW NO.	COURSE TITLE
PE 74.1	PE 206	Cross Country, Men
PE 74.2	PE 208	Cross Country, Women
PE 75	PE 210	Football, Men
PE 76	PE 213	Intercollegiate Golf
PE 80.1	PE 217	Soccer - Men
PE 80.2	PE 219	Soccer - Women
PE 81	PE 221	Softball, Women
PE 82.1	PE 223	Swimming, Men
PE 82.2	PE 225	Swimming, Women
PE 83.1	PE 227	Tennis, Men
PE 83.2	PE 229	Tennis, Women
PE 84.1	PE 231	Track and Field, Men
PE 84.2	PE 233	Track and Field, Women
PE 85.2	PE 235	Volleyball, Women
PE 86	PE 239	Water Polo
PE 86.1	PE 241	Water Polo, Women
PE 87	PE 243	Wrestling
PE 91	PE 2	Individualized Athletic Development
PE 92	PE 245	Pep Unit
PE 92.1	PE 137	Song Unit
PE 95.1	PE 120	Sedentary Activities for the Disabled
PE 95.2	PE 121	Aerobic Activities for the Disabled
PE 95.3	PE 122	Circuit Weight Training for the Disabled
PE 95.4	PE 123	Swimming for the Disabled
PE 95.5	PE 124	Wheelchair Activities
	PE 261	Athletic Injury Taping, Bandaging, and Immobilization
	PE 192	Dance and Digital Technology
	PE 260	Athletic Injury Assessment and Reconditioning
	PE 255	Programs and Principles of Conditioning
PS 20	PS 100	Physical Science of Modern Technology
PTA 10	PTA 110	Introduction to Physical Therapy
PTA 20	PTA 120	Kinesiology
PTA 25	PTA 125	Pathology
PTA 25.10	PTA 126	Clinical Practicum I
PTA 28	PTA 128	Physical Therapy Aspects of Growth, Development and Aging
PTA 30	PTA 230	Therapeutic Exercise
PTA 33	PTA 233	Prosthetics and Orthotics for Allied Health Professionals
PTA 35	PTA 235	Neurology
PTA 35.10	PTA 236	Clinical Practicum II
PTA 40	PTA 240	Activities of Daily Living
PTA 40.10	PTA 246	Clinical Affiliation
PTA 45	PTA 245	Advanced Modalities
PHYS 2.1	PHYS 101	General Physics
PHYS 2.2	PHYS 102	General Physics
PHYS 4.1	PHYS 201	Engineering Physics
PHYS 4.2	PHYS 202	Engineering Physics
PHYS 4.3	PHYS 203	Engineering Physics
PHYS 11	PHYS 100	Elementary Physics
PHYS 25	PHYS 50	Principles of Technology
PMT 1	PMT 100	Plastics Composites Manufacturing Technology
PMT 1.1	PMT 1	Plastics Fundamentals
PMT 1.2	PMT 57	Survey of Plastics
PMT 1.5	PMT 58	Industrial Design for Plastics
PMT 12	PMT 59	Injection Molding I
PMT 12.9	PMT 2	Injection Molding Fundamentals
PMT 13	PMT 60	Extrusion
PMT 14	PMT 61	Fiberglass I
PMT 15	PMT 3	Plastics Repair
PMT 17	PMT 62	Plastic Packaging
PMT 19	PMT 63L	Specialty Plastics Lab
PMT 21	PMT 64	Plastics II
PMT 22	PMT 65	Mold Making
PMT 23	PMT 66	Hydraulics and Pneumatics
PMT 24	PMT 67	Fiberglass II
PMT 25	PMT 68	Plastics Materials and Processes
PMT 23.9	PMT 50	Survey of Hydraulics and Pneumatics
PMT 31	PMT 4	Plastics III
PMT 32	PMT 52	Moldmaking II
PMT 33	PMT 5	Survey of Composites
PMT 34	PMT 70	Composites Technology
PMT 35	PMT 51	Composites Fabrication
PMT 36	PMT 53	Composites Repair
PMT 41	PMT 71	Plastics IV
PMT 46	PMT 72	Tooling for Plastics
PMT 47	PMT 221	Model Making
PMT 73	PMT 43	Plastics Manufacturing Technology Occupational Work Experience
PMT 74	PMT 44	Plastics Manufacturing Technology Occupational Work Experience
POL 1	POL 201	Introduction to Political Science and American Government
POL 2	POL 220	Comparative Government
POL 5	POL 101	American Political Institutions
POL 10	POL 210	International Relations
POL 12	POL 230	Contemporary Political Issues: Middle East
POL 18	POL 110	California State and Local Government
POL 15	POL 90	Internet Strategies for Civic Communication
PSYC 1	PSYC 101	General Introductory Psychology
PSYC 2	PSYC 241	Introduction to Psychobiology
PSYC 3	PSYC 103	Critical Thinking in Psychology
PSYC 4	PSYC 210	Elementary Statistics
PSYC 5	PSYC 220	Research Methods
PSYC 10	PSYC 149	Psychology: The Study of Human Behavior
PSYC 11	PSYC 251	Developmental Psychology
PSYC 13	PSYC 261	Social Psychology
PSYC 14	PSYC 271	Abnormal Psychology
PSYC 20	PSYC 139	Issues in Psychology
PSYC 33	PSYC 150	Personal and Social Adjustment
READ 1	READ 200	Analysis and Critical Reading
READ 6	READ 100	Speed Reading Methods and Applications
READ 6.1	READ 100A	Speed Reading: Methods
READ 6.2	READ 100B	Speed Reading: Applications
READ 51	READ 41T	Individualized Reading
READ 52	READ 42	Reading Access for College Success
READ 53	READ 43	Basic Reading Skills

OLD NO.	NEW NO.	COURSE TITLE
READ 54	READ 54	Advanced Reading
READ 56	READ 46	Vocational/Technical Reading
READ 58	READ 5T	Educational Technology Skills for College
READ 59	READ 44	Effective Study Methods for College
READ 60	READ 6	Tutor Training
SL 50	SL 50	Beginning Sign Language
SL 51	SL 51	Intermediate Sign Language
SL 52	SL 48	Intermediate II Sign Language
SOC 1	SOC 101	Introductory Sociology Principles
SOC 2	SOC 201	Social Problems
SOC 8	SOC 215	Sociology of Cultural Diversity: Challenge and Change
SOC 10	SOC 120	Introduction to Human Sexuality
SOC 15	SOC 110	Marriage and the Family
SOC 16	SOC 250	Sociology of Aging
SOC 20	SOC 220	Introduction to Human Services
SOC 22	SOC 230	Juvenile Delinquency
SOC 25	SOC 210	American Minority Relations
SOC 50	SOC 225	Contemporary Social Issues
SPAN 1	SPAN 101	Elementary Spanish
SPAN 1.1	SPAN 111	Elementary Spanish for Spanish Speakers
SPAN 2	SPAN 102	Elementary Spanish
SPAN 2.1	SPAN 112	Elementary Spanish for Spanish Speakers
SPAN 3	SPAN 201	Intermediate Spanish
SPAN 3.5	SPAN 205	Advanced Spanish Composition
SPAN 4	SPAN 202	Intermediate Spanish
SPAN 6	SPAN 206	Hispanic Literature in the Media
SPAN 8.1	SPAN 281	Beginning Conversational Spanish
SPAN 8.2	SPAN 282	Intermediate Conversational Spanish
SPAN 8.3	SPAN 283	Advanced Conversational Spanish
SPAN 10	SPAN 210	Highlights of Hispanic Culture
SPAN 13	SPAN 213	Living Spanish Grammar and Written Communication
SPAN 14	SPAN 214	Living Spanish Grammar and Written Communication
SPAN 16	SPAN 103A	Elementary Spanish for Teacher Preparation I
SPAN 17	SPAN 103B	Elementary Spanish for Teacher Preparation II
SPAN 23	SPAN 223	Spanish for Health and Medical Careers
SPAN 45	SPAN 245	Introduction to Chicano/Mexican American Culture
SPCH 1	SPCH 100	Fundamentals of Oral Communication
SPCH 2	SPCH 130	Fundamentals of Speaking
SPCH 3	SPCH 271	Voice and Articulation
SPCH 4.1	SPCH 140	Oral Interpretation of Literature
SPCH 4.2	SPCH 240	Oral Interpretation: Readers' Theatre
SPCH 5	SPCH 239	Forensics Workshop
SPCH 5.1	SPCH 236	Beginning Forensics Workshop
SPCH 5.2	SPCH 237	Intermediate Forensics Workshop
SPCH 5.3	SPCH 238	Advanced Forensics Workshop
SPCH 6.1	SPCH 160	Parliamentary Procedure
SPCH 6.2	SPCH 165	Group Procedure
SPCH 7	SPCH 132	Fundamentals of Small Group Communication
SPCH 8	SPCH 235	Fundamentals of Argumentation and Persuasion
SPCH 9	SPCH 229	Speech and Language Development in Children
SPCH 10	SPCH 145	Storytelling
SPCH 11	SPCH 110	Intercultural Communication
SPCH 12	SPCH 120	Fundamentals of Interpersonal Communication
SPCH 50.1	SPCH 30	Communication Disorders
SPCH 50.2	SPCH 31	Communication Disorders
SPCH 50.3	SPCH 32	Communication Disorders
SPCH 60	SPCH 60	Introduction to Communication
SPCH 65	SPCH 45	Speech-Communication for Careers
SPCH 66	SPCH 46 - T	Individualized Speech
	SLP 100	Introduction to Speech and Language Pathology
	SLP 110	Normal Communication, Disorders, and Differences
	SLP 120L	Phonetics Lab
	SLP 125	Childhood Disorders and Treatment
	SLP 230	Adaptive Communication Technology
	SLP 235	Adult Disorder and Treatment
	SLP 240	Childhood Field Experience
	SLP 245	Adult Field Experience
TM 1.2	TM 50	Technical Mathematics
TM 14	TM 54	Mathematics for Computer Technology
TH 1	TH 101	Introduction to the Theatre
TH 2	TH 102	History of the Classical Theatre
TH 3	TH 103	History of the Modern Theatre
TH 4	TH 104	History and Appreciation of Musical Theatre
TH 5	TH 105	Introduction to Musical Theatre Techniques
TH 9	TH 108	Improvisation for the Theatre
TH 10	TH 110	Fundamentals of Acting
TH 11	TH 111	Intermediate Acting to Characterization
TH 12	TH 212	Scene Study
TH 13	TH 213	Historical Styles of Acting
TH 14	TH 114	Voice for Acting
TH 15	TH 115	Stage Movement and Combat
TH 16	TH 216	Acting for the Camera
TH 17	TH 117	Stand-Up Comedy
TH 20	TH 120	Theatre Stage Craft
TH 21	TH 221	Costuming for the Stage
TH 22	TH 222	Stage Lighting
TH 23	TH 123	Stage Make-Up
TH 26	TH 226	Introduction to Scenic Design
TH 30.1	TH 130A	Rehearsal and Performance I
TH 30.2	TH 130B	Rehearsal and Performance II
TH 30.3	TH 130C	Rehearsal and Performance III
TH 31.1	TH 131A	Theatre Production I
TH 31.2	TH 131B	Theatre Production II

OLD NO.	NEW NO.	COURSE TITLE
TH 35	TH 135	Showcase
TH 36	TH 136	Community Theatre Production
TH 40	TH 140	Theatre Dance — Beginning Jazz Freestyle
TH 41	TH 141	Theatre Dance — Intermediate Jazz Freestyle
TH 42	TH 142	Theatre Dance — Beginning Tap
TH 43	TH 143	Theatre Dance — Intermediate Tap
TH 44	TH 144	Musical Theatre Workshop
TH 45	TH 145	Costume Production for Dance
TH 50	TH 150	Appreciation and History of the Motion Picture
TH 51	TH 151	Motion Pictures, Radio and Television
TH 52	TH 152	Introduction to Broadcasting
TH 53	TH 153	Motion Picture Production
TH 54	TH 254	Advanced Motion Picture Production
TH 55	TH 155	Radio Production
TH 56	TH 156	Video Production
TH 58	TH 258	Broadcast Writing/Pre-Production
TH 59	TH 159	Multicultural Film
TH 60	TH 160	Great Film Directors
WELD 10	WELD 100	Welding Fundamentals
WELD 12	WELD 110	Oxyacetylene Welding
WELD 14	WELD 120	Beginning Arc Welding
WELD 15	WELD 50	Blue Print Reading for the Welding Trades
WELD 17	WELD 170	Structural Fabrication
WELD 20	WELD 200	Intermediate Arc Welding
WELD 25	WELD 130	Gas Tungsten Arc Welding Fundamentals
WELD 30	WELD 210L	Advanced Arc Welding
WELD 33	WELD 220	Certification and Licensing for Welders
WELD 35	WELD 51L	Advanced Arc Welding Specialty Lab
WELD 38	WELD 240	Advanced Gas Tungsten Arc Welding Laboratory
WELD 40	WELD 52	Pipe Welding Fundamentals
WELD 41	WELD 53	Pipe Layout
WELD 43	WELD 54L	Advanced Pipe Welding
WELD 46	WELD 250L	Gas Tungsten Arc Welding Specialty Lab
WELD 48	WELD 55	Maintenance Welding
WELD 73	WELD 43	Welding Occupational Work Experience
WELD 74	WELD 44	Welding Occupational Work Experience
WMT 10	WMT 1	Open Entry/Exit Woodworking
WMT 10.1	WMT 101	Introduction to Woodworking
WMT 10.2	WMT 102	Machine Wood Technology
WMT 10.3	WMT 103	Machine Wood Technology II
WMT 10.7	WMT 107	Wood Finishing
WMT 11.1	WMT 111L	Introduction to Woodworking Lab
WMT 11.8	WMT 118	Wood Turning
WMT 13.2	WMT 132	Chair Design and Construction
WMT 13.4	WMT 134	Frame Making
WMT 13.7	WMT 137	Outdoor Furniture
WMT 14.8	WMT 148	Furniture Making and Manufacturing
WMT 15.1	WMT 151	Introduction to Cabinetmaking
WMT 15.3	WMT 153	32MM System of Cabinetmaking
WMT 15.5	WMT 155	Architectural Millwork
WMT 17.1	WMT 171	Introduction to Wooden Boat Building
WMT 18.1	WMT 181	Introduction to Computer Operations for Cabinetmaking and Design
WMT 20.1	WMT 201	Woodworking with Hand Tools
WMT 20.2	WMT 202	Advanced Machine Wood Technology
WMT 21.1	WMT 211	The Workbench Class
WMT 21.2	WMT 212	Routers and Router Tables
WMT 22.8	WMT 228L	Project Completion Lab
WMT 22.9	WMT 229L	Comprehensive Woodworking Manufacturing Specialty
WMT 24.8	WMT 248	Production Furniture Making and Manufacturing
WMT 24.9	WMT 249L	Furniture Manufacturing Specialty
WMT 25.1	WMT 251	Advanced Cabinetmaking
WMT 25.3	WMT 253	Advanced 32MM System of Cabinetmaking
WMT 26.8	WMT 268	Production Cabinetmaking and Manufacturing
WMT 26.9	WMT 269L	Cabinetmaking Manufacturing Specialty
WMT 28.1	WMT 281	Advanced Computer Operations for Cabinetmaking and Design
WMT 73	WMT 43	Woodworking Manufacturing Technologies Occupational Work Experience
WMT 74	WMT 44	Woodworking Manufacturing Technologies Occupational Work Experience
	WMT 233	Morris Chair
ZOOL 10	ZOOL 120	Introduction to Animal Biology

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. DEPART MENT 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

DEPARTMENT REQUIREMENTS		**Required (12 units)**
AJ 110	Concepts of Enforcement Services	3
AJ 220	Criminal Investigation	3
PSYC 101	General Introductory Psychology	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
BASS 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.

ADMINISTRATION OF JUSTICE—776 TRANSFER PROGRAM

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

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 120	Introduction to Biological Science	4
BOT 120	Introduction to Plant Science	4
CHEM 111	General Chemistry	5
CHEM 112	General Chemistry	5
ECON 201	Principles	3
or ECON 202	Principles	(3)

Consult catalogs and your counselor for selection from the following math and science courses applicable to the option you plan to specialize in at the four-year college level.

MATH 140	Trigonometry	3
MATH 101	Pre Calculus Math	4
MATH 116	Calculus for Managerial, Biological & Social Sciences	4
ZOOL 120	Introduction to Animal Science	4
PHYS 101	General Physics	4
MICR 200	Introductory Microbiology	5
CHEM 211	Organic Chemistry	5

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

LOWER DIVISION RECOMMENDED COURSES FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Long Beach:

BIOL 120	Introduction to Biological Science	4
GEOL 110	Introduction to Geology	3
PSYC 101	General Introductory Psychology	3
SOC 101	Introductory Sociology	3

California State University - Los Angeles:

A modern foreign language (1 and 2 level) or successful completion of 3 years of high school foreign language will be accepted as equivalent.

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.

ADDITIONAL RECOMMENDED ELECTIVES: ANTH 200, ART 106, SPAN 245, PSYC 101

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.

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		UNITS
ARCH 50	Fundamentals of Computer Aided Drafting for Architecture	4
ARCH 51	Advanced Applications of Computer Aided Drafting for Architecture	4
ARCH 110	Introduction to Architecture and Environmental Design	3
ARCH 111	Architectural Drafting	3
ARCH 112	History of Architecture	3
ARCH 113	Building Codes	4
ARCH 121	Materials and Methods of Building Construction	3
ARCH 122	Architectural Delineation	2
ARCH 211	Architectural Design, Programming & Presentation	3
ARCH 212	Architectural Design Theory I	3
ARCH 22	Working Drawing/Architectural Desktop	3
ARCH 222	Architectural Design Theory II	3
ART 110	Freehand Drawing	3

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 draftsperson, 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

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

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 102	Analytic Geometry and Calculus I	4
MATH 103	Analytic Geometry and Calculus II	4
PHYS 201	Engineering Physics	4
PHYS 203	Engineering Physics	4

University of California - Berkeley

ART 110	Freehand Drawing	3
ART 121	Three - Dimensional Design	3
MATH 102	Analytic Geometry and Calculus I	4
MATH 103	Analytic Geometry and Calculus II	4
PHYS 201	Engineering Physics	4

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.
See State University General Education List.

ART AND DESIGN—111
ASSOCIATE IN ARTS DEGREE

REQUIRED COURSES (15 units)		UNITS
ART 102	Appreciation and History	3
or ART 103	Modern and Contemporary Appreciation	(3)
ART 110	Freehand Drawing	3
ART 112	Life Drawing	3
ART 120	Two-Dimensional Design	3
ART 121	Three-Dimensional Design	3

ART OPTIONAL TRACKS (Choose One)

ART HISTORY		Required (12 units)
ART 100	World Art History	3
ART 101	Appreciation and History	3
ART 102	Appreciation and History	3
or ART 103	Modern and Contemporary Appreciation	(3)
ART 106	Mexican Art	3

CERAMICS		Required (6 units)
ART 150	Beginning Ceramics I	3
ART 151	Beginning Ceramics II	3

JEWELRY		Required (12 units)
ART 144	Jewelry	3
ART 145	Lost Wax Casting/Rubber Mold Making	3
ART 246	Jewelry Design Fabrication	3

DRAWING AND PAINTING— (9 units)

ART 130A	Fundamentals of Painting	3
ART 130B	Fundamentals of Painting	3
ART 136	Beginning Painting for Art Majors	3

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
or ART 265	Sculpture IV	(3)

DESIGN OPTIONAL TRACKS (CHOOSE ONE)
GRAPHIC DESIGN— (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— (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	Intermediate Ceramics I	3
ART 253	Intermediate Ceramics II	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.

ART AND DESIGN—116
TRANSFER PROGRAM

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

ART AND DESIGN

ART 101	Appreciation and History	3
ART 102	Appreciation and History	3
ART 110	Freehand Drawing	3
ART 120	Two - Dimensional Design	3
ART 121	Three - Dimensional Design	3

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

Available Options: Art History, Design, and Studio Art

California State University - Fullerton

ART 112	Life Drawing	3
ART 130A	Fundamentals of Painting	3
ART 130B	Fundamentals of Painting	3

Available Concentration: Art History; General Studio Art; Teaching (single-subject instruction); Ceramics, Crafts; Creative Photography; Drawing and Painting; Entertainment Art / Animation; Graphic Design; Illustration; Printmaking; and Sculpture.

California State University - Long Beach

ART 136	Beginning painting for Art Majors	3

Available Options: Art History; Art Education (single-subject instruction); Art Photography; Ceramics; Drawing and Painting; Illustration; 3-D Fiber Media; Printmaking; Sculpture, and Graphic Design.

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)

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:

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

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

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

AUTOBODY MANAGEMENT—852
CERTIFICATE OF ACHIEVEMENT

REQUIRED COURSES		UNITS
AB 1	Collision Estimating I	3
AB 51	Collision Repair I	5
AB 56	Automotive Welding	2
AB 61	Refinishing I	5
AB 72	Auto Body Management Specialty (3 @ 1.5 units)	6
AB 80	Auto Body Customer Service	2
AB 82	Collision Estimating II	3
AB 83	Collision Estimating Specialty (3 @ 1.5 unit)	4.5
AB 85	Collision Repair Management	3
AB 86	Collision Repair Production	2
TOTAL CERTIFICATE REQUIREMENT		35.5

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		UNITS
AB 1	Collision Estimating I	3
AB 2	Automotive Refinishing and Color Matching	1.5
AB 45	Pinstriping and Lettering	2
AB 51	Collision Repair I	5
AB 56	Automotive Welding	2
AB 61	Refinishing I	5
AB 62	Automotive Refinishing II	5
AB 63	Production Automotive Refinishing III	5
AB 85	Collision Repair Management	3
AB 86	Collision Repair Production	2
TOTAL CERTIFICATE REQUIREMENT		34.5

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		UNITS
AB 1	Collision Estimating I	3
AB 42	Collision Repair V	5
AB 51	Collision Repair I	5
AB 52	Collision Repair II	5
AB 53	Collision Repair III	5
AB 54	Collision Repair IV	5
AB 56	Automotive Welding	2
AB 57	Advanced Automotive Welding	2
AB 61	Automotive Refinishing I	5
AB 86	Collision Repair Production	2
TOTAL CERTIFICATE REQUIREMENT:		39

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 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, 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

		UNITS
AUTO 100	Maintenance	4
AUTO 120	Brake & Alignment	5
AUTO 130	Electrical	4
AUTO 140	Engines	5
AUTO 160	Drive Train	4
AUTO 223	Body Electrical	4
AUTO 226	Automatic Transmission	5
		31

AUTOMOTIVE MECHANICAL REPAIR TECHNOLOGY-ELECTRICAL / DIAGNOSIS TECHNICIAN—804

		UNITS
AUTO 100	Maintenance	4
AUTO 130	Electrical	5
AUTO 140	Engines	5
AUTO 170	Emission Control	5
AUTO 180	Air Conditioning	4
AUTO 223	Body Electrical	4
AUTO 233	Fuel Systems	5
AUTO 243	Diagnostic Engine Performance	4
		36

AUTOMOTIVE MECHANICAL REPAIR ENGINE / MACHINING TECHNOLOGY—805

		UNITS
AUTO 100	Maintenance	4
AUTO 140	Engines	5
AUTO 224	Advanced Engines	5
AUTO 150	Machine Shop I	5
AUTO 225	Machine Shop II	5
AUTO 245L	Automotive Specialty	2
		26

AUTOMOTIVE MECHANICAL REPAIR TECHNOLOGY-MANUFACTURE SPECIALTY—806

		UNITS
AUTO 51	Air Conditioning	4
AUTO 73	Work Experience	15
AUTO 121	Brake & Alignment	6
AUTO 131	Electrical	7
AUTO 141	Engines	4
AUTO 161	Power Train	6
AUTO 231	Diagnostic Engine Performance	6
		48

AUTOMOTIVE MECHANICAL REPAIR ELECTRIC VEHICLE (EV) TECHNOLOGY—808

Recommended High School Preparation:
Algebra, Automotive Repair, Electronics

BASIC CORE COURSES		UNITS
AUTO 100	Automotive Maintenance and Operation	4
AB 51	Collision Repair I	5
AUTO 54	Introduction to Electric Vehicles	4
AUTO 55	Advanced Technology Electric Vehicles	4
EL 86	Electric Motor Control	3
EL 100	Basic Electronics	4
TM 50	Technical Mathematics	3
WELD 100	Welding Fundamentals	2
		29

And six (6) units selected from the following courses:

AB 57	Advanced Automotive Welding	2
AUTO 130	Automotive Electricity	5
EL 110	Principles of DC Electronics	4
EL 110L	Principles of DC Electronics Laboratory	1
EL 120	Principles of AC Electronics	4
EL 120L	Principles of AC Electronics Laboratory	1
PMT 100	Plastics Technology I	2
PMT 61	Fiberglass I	1
WELD 110	Oxyacetylene Welding	4
		35

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

		UNITS
ENGL 106	Introduction to Language Study	3
*SPAN 112	Elementary Spanish for Spanish Speakers	5
SPAN 201	Intermediate Spanish	5
SPAN 213	Living Spanish Grammar	2
SPAN 214	Living Spanish Grammar	2
SPAN 245	Introduction to Chicano Studies	3
CD 110	Child Development and Guidance	3

*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 credentialed 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

		UNITS
BIOL 200	Principles of Biology	5
BIOL 201	Principles of Biology	5
CHEM 111	General Chemistry	5
CHEM 112	General Chemistry	5
PHYS 101	General Physics	4
PHYS 102	General Physics	4

ADDITIONAL LOWER DIVISION REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Dominguez Hills

MATH102	Analytic Geometry and Calculus I	4
or MATH 116	Calculus for Managerial, Biological, and Social Sciences	(4)
MATH 112	Elementary Statistics	4
As option to PHYS 101 & 102:		
PHYS 201	Engineering Physics	(4)
AND PHYS 202	Engineering Physics	(4)

California State University - Fullerton

BOT 120	Introduction to Planet Science	4
MATH 102	Analytic Geometry and Calculus I	4
or MATH 116	Calculus for Managerial, Biological, and Social Sciences	(4)
ZOOL 120	Introduction to Animal Biology	4

California State University - Long Beach

MATH 102	Analytic Geometry and Calculus I	4
MATH 103	Analytic Geometry and Calculus II	4
or MATH 116	Calculus for Managerial, Biological, and Social Sciences	(4)

California State University - Los Angeles

CHEM 205	Quantitative Analysis Chemistry	4
MATH 102	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

MATH 102	Analytic Geometry and Calculus I	4
MATH 103	Analytic Geometry and Calculus II	4
or MATH 112	Elementary Statistics	(4)
or PSYC 210	Elementary Statistics	(4)

University of California - Los Angeles

MATH 102	Analytic Geometry and Calculus I	4
MATH 103	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 Biology are designed to qualify the student to enter graduate schools, to enter teaching at the primary and secondary level, and are appropriate for some applied work in laboratories, federal employment, state civil service and the pharmaceutical industry.

BOTANY—685
TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION

FOR THE CALIFORNIA STATE UNIVERSITY		**UNITS**
MATH 116	Calculus for Managerial Biological and Social Sciences	4
BIOL 200	Principles of Biology	5
AND BIOL 201	Principles of Biology	5
CHEM 111	General Chemistry	5
CHEM 112	General Chemistry	5
MICRO 200	Introduction to Microbiology and Bacteriology	5
PHYS 101	General Physics	4
PHYS 102	General Physics	4

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete 60 units to include (1) the above required courses (2) electives as needed and (3) the Associate in Arts degree 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:		**UNITS**
*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
or 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

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

*Prerequisite for BUSA 101 - BUSA 100.

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

See Cerritos College Graduation Requirements.

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
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)
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 Tax Accounting	3
BA 111	Business Law	3
BASS 108	WordPerfect for Windows	3
or BASS 112	Word for Windows	(3)
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 Tax Accounting	3
BUSA 250	Income Tax Accounting	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
BA 111	Business Law
BASS 108	WordPerfect for Windows
or BASS 112	Word for Windows

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 GENERAL—200

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

In order to qualify for an Associate in Arts Degree in General Business the following requirements must be met:

1. Completion of the A.A. degree general education and proficiency requirements;
2. Completion of a minimum of 60 degree applicable units.
3. Completion of at least 18 units selected from any of the courses offered by the Business Division. The Business Division departments are listed below:
   a. Business Accounting/Finance
   b. Business Administration
   c Business Administrative Support Systems/Business Communications
   e. Business Court Reporting
   f. Business Paralegal
   g. Business Real Estate

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

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

See Cerritos College Graduation Requirements.

CAREER OPPORTUNITIES: Prepares the student for a variety of career opportunities in business, industry, government, 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 Business 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
BUSA 101	Fundamentals of Accounting I	4
BUSA 102	Fundamentals of Accounting II	4
CIS 101	Introduction to Business Computer Information Systems	3
ECON 201	Principles	3
ECON 202	Principles	3

Plus, a transfer level Math course from General Education recommended Math 112, 115, 116.

California State University - Fullerton

BA 113	Legal Environment of Business	3
BUSA 100	Introduction to Accounting	3
BUSA 101	Fundamentals of Accounting I	4
BUSA 102	Fundamentals of Accounting II	4
BUSA 133	Spreadsheet Accounting I	3
CIS 101	Introduction to Business Computer Information Systems	3
ECON 201	Principles	3
ECON 202	Principles	3
MATH 116	Calculus for Managerial, Biological, and Social Sciences	4

One additional Social Science course from any course in Area D. 3 of the Cal State University General Education Requirements. CSUF also requires a lower division business writing course not offered at Cerritos College.

California State University - Los Angeles

BA 111	Business Law	3
BUSA 100	Introduction to Accounting	3
BUSA 101	Fundamentals of Accounting I	4
BUSA 102	Fundamentals of Accounting II	4
CIS 101	Introduction to Business Computer Information Systems	3
ECON 201	Principles	3
ECON 202	Principles	3
MATH 112	Elementary Statistics	4

California State University - Long Beach

BA 111	Business Law	3
BUSA 100	Introduction to Accounting	3
BUSA 101	Fundamentals of Accounting I	4
CIS 101	Introduction to Business Computer Information Systems	3
ECON 201	Principles	3
ECON 202	Principles	3
MATH 115	Finite Mathematics	4
MATH 116	Calculus for Managerial, Biological, and Social Sciences	4

Every Business Administration major at CSULB must take either PHIL 106 (Logic) or PHIL 102 (Ethics). If you plan to specialize in MIS, you must take PHIL106. If you plan on specialize in Accounting you must take PHIL 102. Specialists in Accounting must take a course in Anthropology, Psychology, or Sociology.

California State Polytechnic University - Pomona

BA 111	Business Law	3
BUSA 100	Introduction to Accounting	3
BUSA 101	Fundamentals of Accounting I	4
BUSA 102	Fundamentals of Accounting II	4
CIS 101	Introduction to Business Computer Information Systems	3
ECON 201	Principles	3
ECON 202	Principles	3
MATH 112	Elementary Statistics	4

Majors in Accounting or Finance and Law must take Math 116 and either English 102 or 103.

University of Southern California

BUSA 100	Introduction to Accounting	3
BUSA 101	Fundamentals of Accounting I	4
BUSA 102	Fundamentals of Accounting II	4
CIS 101	Introduction to Business Computer Information Systems	3
ECON 201	Principles	3
ECON 202	Principles	3
ENGL 100	Freshman Composition	3
ENGL 102	Freshman Composition and Literature	3
or ENGL 103	Critical and Argumentative Writing	(3)
or PHIL 202	Critical Thinking and Argumentative Writing	(3)
MATH 116	Calculus for Managerial, Biological, and Social Sciences	4

University of California - Riverside

BA 100	Fundamentals of Business	3
BUSA 100	Introduction to Accounting	3
BUSA 101	Fundamentals of Accounting I	4
BUSA 102	Fundamentals of Accounting II	4
ECON 201	Principles	3
ECON 202	Principles	3
MATH 102	Analytical Geometry and Calculus I	4
MATH 112	Elementary Statistics	4
or PSYC 210	Elementary Statistics	(4)
PSYC 220	Research Methods	4

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete the Following Common Lower Division Requirements: 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.

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:		UNITS
BA 100	Fundamentals of Business	3
BA 101	International Business	3
BA 107	Human Relations in Business	3
BA 111	Business Law	3
BA 115	Management-Business	3
or BA 53	Small Business Management	(3)
BA 117	Introduction to Supervision	3
BA 171-174	Business Administration Occupational Work Experience	1-4
TOTAL CERTIFICATE REQUIRMENTS:		19/22

ASSOCIATE IN ARTS DEGREE REQUIRMENTS:

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 109, BA 112 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 101or SOC 101
2. Small Business Ownership
   BA 53 and BA 54, BA 110 or BA 101
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: **UNITS**

1. COMPLETION OF 9 UNITS IN COURSES SELECTED FROM ONE OF THE DEPARTMENTS LISTED BELOW:
   a. Business Accounting/Finance
   b. Business Administration
   c. Business Administrative Support Systems/Business Communications
   d. Business Court Reporting
   e. Business Paralegal
   f. Business Real Estate
2. COMPLETION OF 12 UNITS OF OCCUPATIONAL WORK EXPERIENCE COURSES IN THE SAME OCCUPATIONAL DISCIPLINE AS LISTED ABOVE. (REQUIREMENT: CONCURRENT ENROLLMENT IN ONE 4-UNIT WORK EXPERIENCE COURSE AND ONE 3-UNIT COURSE FROM DEPARTMENT SELECTED.)

EXAMPLE:
(Using the Business Administration Department)

BA 100	Fundamentals of Business	3
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:		21

*This program permits 12 units of credit to be earned on the job. The student must work at least 20 hours per week in a related industry.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements for a Certificate of Achievement in Business Employment Development. Complete BA 101, BA 107, BA 111, BA 112, BA 115 or BA 53, 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:		UNITS
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	ManagementBusiness	3
BA 123	ManagementRetailing	3
BA 171-174	Business Administration Occupational Work Experience	1-4
BA 203	ManagementDepartment 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
BUSA 241	Managerial Accounting	4
CIS 101	Introduction to Business Computer Information Systems	3
CIS 102	Introduction to Microcomputer Systems for Business	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 general education requirements and electives 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 MARKETING—213
CERTIFICATE OF ACHIEVEMENT

DIVISION / DEPARTMENT REQUIREMENTS		UNITS
BA 100	Fundamentals of Business	3
BA 101	International Business	3
BA 107	Human Relations in Business	3
BA 110	Advertising	3
BA 114	Marketing	3
BA 121	Sales	3
BA 171/174	Business Administration Occupational Work Experience	1-4
TOTAL CERTIFICATE REQUIREMENTS:		19/22

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements for a Certificate of Achievement in Business Marketing. Complete BA 50 or CIS 101 or CIS 102, BA 53, 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	ManagementBusiness	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 Business 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

COURSE COMPLETION CERTIFICATE - 3 semester units

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 Management	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 Business 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 for additional alternatives.

BUSINESS ADMINISTRATIVE SUPPORT SYSTEMS

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
BASS 80	Processing Law Office Documents	2
BASS 81	Legal Office Procedures	4
BASS 83	Legal Office Terminology/Machine Transcription	4
BASS 108	WordPerfect for Windows	3
or BASS 112	Microsoft Word For Windows	(3)
BASS 133	Intermediate Typing/Keyboarding	3
BASS 135	Typewriting Speed/Control Building	1
BASS 162	Business Spelling and Proofreading Skills	3
BL 100	Introduction to California Civil Procedures	3
TOTAL CERTIFICATE REQUIREMENTS:		27.5

ASSOCIATE IN ARTS REQUIREMENT:

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 a Business counselor 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 three units from the following:

BASS 50	Advanced WordPerfect for Windows	3
BASS 51	Advanced Microsoft Word for Windows	3
TOTAL CERTIFICATE REQUIREMENTS:		30.5

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
BASS 80	Processing Law Office Documents	2
BASS 81	Legal Office Procedures	4

BASS 82	Spanish Legal Office Terminology and Vocabulary	1.5
BASS 83	Legal Office Terminology/Machine Transcription	4
BASS 108	WordPerfect for Windows	3
or BASS 112	Microsoft Word For Windows	(3)
BASS 133	Intermediate Typing/Keyboarding	3
BASS 135	Typewriting Speed/Control Building	1
BASS 162	Business Spelling and Proofreading Skills	3
BL 100	Introduction to California Civil Procedures	3
TOTAL CERTIFICATE REQUIREMENTS:		29

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements for a Certificate of Achievement in Legal Secretary/Bilingual - 259

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
BASS 131	Beginning Typing/Keyboarding	3
or BASS 61	Typing/Keyboarding Review	(2)
BASS 161	Principles of Filing	1
BASS 162	Business Spelling and Proofreading Skills	3
TOTAL CERTIFICATE REQUIREMENTS		7.5/8.5

NOTE: Although many of these courses are transferable, this Certificate of Completion is nontransferable.

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

See Cerritos College Graduation Requirements.

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
BASS 60	Telephone Techniques/Customer Service	1
BASS 108	WordPerfect for Windows	3
or BASS 112	Microsoft Word for Windows	(3)
BASS 114	Microsoft Office for Administrative Support Personnel	3
BASS 131	Beginning Typing/Keyboarding	3
or BASS 61	Typing/Keyboarding Review	(2)
BASS 133	Intermediate Typing/Keyboarding	3
BASS 135	Typewriting Speed/Control Building (Two 9-week classes)	2
BASS 155	Administrative Secretarial Procedures	4
BASS 161	Principles of Filing	1
BASS 162	Business Spelling and Proofreading Skills	3
TOTAL CERTIFICATE REQUIREMENTS:		29.5/30.5

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
BASS 60	Telephone Techniques/Customer Service	1
BASS 131	Beginning Typing/Keyboarding	3
or BASS 61	Typing/Keyboarding Review	(2)
BASS 161	Principles of Filing	1
TOTAL CERTIFICATE REQUIREMENTS:		5.5/6.5

NOTE: Although many of these courses are transferable, this Certificate of Completion is nontransferable.

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

See Cerritos College Graduation Requirements.

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
BASS 50	Advanced WordPerfect for Windows	3
or BASS 51	Advanced Microsoft Word for Windows	(3)
BASS 108	WordPerfect for Windows	3
or BASS 112	Microsoft Word for Windows	(3)
BASS 131	Beginning Typing/Keyboarding	3
or BASS 61	Typing/Keyboarding Review	(2)
BASS 133	Intermediate Typing/Keyboarding	3
BASS 135	Typewriting Speed/Control Building (Two 9-week classes)	2
BASS 162	Business Spelling and Proofreading Skills	3
BASS 163	Machine Transcription	4
TOTAL CERTIFICATE REQUIREMENTS:		27.5/28.5

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
BASS 60	Telephone Techniques/Customer Service	1
BASS 108	WordPerfect for Windows	3
or BASS 112	Microsoft Word for Windows	(3)
BASS 131	Beginning Typing/Keyboarding	3
or BASS 61	Typing/Keyboarding Review	(2)
BASS 135	Typewriting Speed/Control Building (Two 9-week classes)	2
BASS 161	Principles of Filing	1
BASS 162	Business Spelling and Proofreading Skills	3
TOTAL CERTIFICATE REQUIREMENTS:		17.5/18.5

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
BASS 50	Advanced WordPerfect for Windows	3
BASS 51	Advanced Microsoft Word for Windows	3
BASS 108	WordPerfect for Windows	3
BASS 112	Microsoft Word for Windows	3
BASS 131	Beginning Typing/Keyboarding	3
or BASS 61	Typing/Keyboarding Review	(2)
BASS 133	Intermediate Typing/Keyboarding	3
BASS 135	Typewriting Speed/Control Building (Two 9-week classes)	2
BASS 161	Principles of Filing	1
BASS 162	Business Spelling and Proofreading Skills	3
BASS 163	Machine Transcription	4
TOTAL CERTIFICATE REQUIREMENTS:		34.5/35.5

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
BASS 108	WordPerfect for Windows	3
or BASS 112	Microsoft Word for Windows	(3)
BASS 114	Microsoft Office for Administrative Support Personnel	3
BASS 133	Intermediate Typing/Keyboarding	3
BASS 135	Typewriting Speed/Control Building (Two 9-week classes)	2
BASS 155	Administrative Secretarial Procedures	4
BASS 161	Principles of Filing	1
BASS 162	Business Spelling and Proofreading Skills	3
BASS 163	Machine Transcription	4
TOTAL CERTIFICATE REQUIREMENTS:		27.5

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:		
BASS 50	Advanced WordPerfect for Windows	3
or BASS 51	Advanced Microsoft Word for Windows	(3)
TOTAL CERTIFICATE REQUIREMENTS:		30.5

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:

BASS 108	WordPerfect for Windows	3
BASS 110	Desktop Publishing-WordPerfect for Windows	1.5
or BASS 116	Desktop Publishing-Word for Windows	(1.5)
BASS 112	Microsoft Word for Windows	3

Choose three units from the following:

BASS 50	Advanced WordPerfect for Windows	3
BASS 51	Advanced Microsoft Word for Windows	3
TOTAL CERTIFICATE REQUIREMENTS:		38

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
BASS 70	Medical Machine Transcription	4
BASS 108	WordPerfect for Windows	3
or BASS 112	Microsoft Word for Windows	(3)
BASS 133	Intermediate Typing/Keyboarding	3
BASS 135	Typewriting Speed/Control Building	1
BASS 162	Business Spelling and Proofreading Skills	3
MA 161	Medical Terminology	3
TOTAL CERTIFICATE REQUIREMENTS:		21.5

OPTIONAL SPECIALTIES

COMPLETION OF ALL THE COURSES LISTED IN MEDICAL TRANSCRIPTIONIST - 247 AND ADDITIONAL COURSES LISTED BELOW:

SECRETARY - MEDICAL ENVIRONMENT

BASS 71	Computers in the Medical Office	3
BASS 155	Administrative Secretarial Procedures	4
BASS 161	Principles of Filing	1

BILINGUAL SECRETARY - MEDICAL ENVIRONMENT

BASS 71	Computers in the Medical Office	3
BASS 155	Administrative Secretarial Procedures	4
BASS 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
TOTAL REQUIREMENTS MUST BE A MINIMUM OF		32.5/33

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
		12

CRIMINAL

AJ 102	Concepts of Criminal Law	3
AJ 103	Criminal Procedures	3
AJ 202	Substantive Law	3
		9

PROBATE & ESTATE PLANNING

BL 107	Probate Procedures	3
BL 112	Estate Planning for the Paralegal	3
BUSR 125	Legal Aspects of Real Estate	3
		9

LITIGATION

BL 102	Advanced California Civil Procedures	3
BL 104	Advanced Legal Research	3
BL 113	Fundamentals of Alternate Dispute Resolutions	3
		9

FAMILY LAW

BL 102	Advanced California Civil Procedures	3
BL 104	Advanced Legal Research	3
BL 108	Family Law Procedures	3
		9

LEGAL OFFICE PROCEDURES

BL 52	Law Office Management	3
BL 57	Legal Document Production	3
BL 250	Legal Interviewing	1.5
		7.5

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 LEGAL MINOR CERTIFICATE OF COMPLETION (9 UNITS)

The Business Legal Minor may be obtained by completing three of the following core courses with a grade of Credit or "C" or higher: BL 101, Introduction to Law; BA 111, Business Law; BA 112, Business Law; BA 113, Legal Environment of Business.

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.

		HOURS
Vocabulary		80
English		135
Medical		125
Legal		175
Transcript Procedures		60
Apprenticeship Training		50
BUSC 114	Medical Terminology for Machine Shorthand	90
BUSC 115	Medical Shorthand for Court Reporters	90
BUSC 118	Deposition Procedures, Codes & Ethics	110
BUSC 119A	Beginning Computer-Aided Transcription	72
BUSC 119B	Intermediate Computer-Aided Transcription	72
BUSC 119C	Advanced Computer-Aided Transcription	72
BUSC 140	Computerized Shorthand Theory	108
BUSC 141	Computerized Shorthand Theory Review/Skill Development	108
BUSC 142	Intermediate Computerized Shorthand	108
BUSC 143	Computerized Shorthand Speed Building I	108
BUSC 144	Computerized Shorthand Speed Building II	108
BUSC 145	Computerized Shorthand Speed Building III	108

BUSC 146	Computerized Shorthand Speed Building (140-170 wpm)	108
BUSC 147	Computerized Shorthand Speed Building (160-190 wpm)	108
BUSC 148	Computerized Shorthand Speed Building (180-210 wpm)	108
BUSC 149	Computerized Shorthand Speed Building (190-225 wpm)	108
BUSC 192	Transcription Procedures	54
ENGL 107	Vocabulary Building	54
ENGL 108	Vocabulary Building for Professionals	36

Choose from the following courses for a minimum of 135 hours:

BASS 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:

AJ 103	Criminal Procedures	54
BUSC 113	Legal Terminology	72
BUSC 116	Introduction to Courtroom Procedures	108
BA 111	Business Law	54
BA 112	Business Law	54
BL 101	Introduction to Law	54

Recommended typing courses:

BASS 131	Beginning Typing/Keyboarding	90
BASS 135	Typewriting Speed/Control Building	54

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:

		Units
BUSC 113	Legal Terminology	3
BUSC 114	Medical Terminology	3
BUSC 116	Introduction to Courtroom Procedures	4
BUSC 118	Deposition Procedures, Codes & Ethics	4
BUSC 119A	Beginning Computer-Aided Transcription	2
BUSC 140	Computerized Shorthand Theory	3
BUSC 141	Computerized Shorthand Theory Review	3
BUSC 142	Intermediate Computerized Shorthand	3
BUSC 143	Computerized Shorthand Speed Building I	3
BCOM 147	Business Communications	3
TOTAL		31

CERTIFIED REALTIME REPORTER—234
CERTIFICATE OF ACHIEVEMENT

DIVISION / DEPARTMENT REQUIREMENTS		UNITS
BUSC 57B	Advanced Aural Language Skills for Court Reporters	3
BUSC 113	Legal Terminology	3
BUSC 115	Medical Shorthand for Court Reporters	4
BUSC 116	Introduction to Courtroom Procedures	4
BUSC 118	Deposition Procedures, Codes and Ethics	4
BUSC 119A	Beginning Computer-Aided Transcription	2
BUSC 119B	Intermediate Computer-Aided Transcription	2
BUSC 119C	Advanced Computer-Aided Transcription	2
BUSC 119D	Basic Concepts of Realtime	2
*BUSC 130	Computerized Shorthand Realtime Practicum (190-225 WPM)	3
BUSC 173/174	Business Court Reporting/Computerized Shorthand Occupational Work Experience	3/4
CIS 121	Introduction to the Internet	1.5
LIB 100	Introduction to Library Resources	1

Choose six units from the following:

BASS 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:		40.5/41.5

*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.

CLASSROOM CAPTIONING STENO INTERPRETING - COURT REPORTING METHOD—236
CERTIFICATE OF ACHIEVEMENT

DIVISION / DEPARTMENT REQUIREMENTS		UNITS
BUSC 57B	Advanced Aural Language Skills for Court Reporters	3
BUSC 113	Legal Terminology	3
BUSC 114	Medical Terminology for Machine Shorthand	3
BUSC 116	Introduction to Courtroom Procedures	4
BUSC 119A	Beginning Computer-Aided Transcription	2
BUSC 119B	Intermediate Computer-Aided Transcription	2
BUSC 119C	Advanced Computer-Aided Transcription	2
BUSC 119D	Basic Concepts of Realtime	2
BUSC 139	Exploring Career Opportunities in Court Reporting	1
*BUSC 147	Computerized Shorthand Speed Building (160-190 WPM)	3
BUSC 173/174	Business Court Reporting/Computerized Shorthand Occupational Work Experience	3/4
BASS 108	WordPerfect for Windows	3
or BASS 112	Microsoft Word for Windows	(3)
CIS 121	Introduction to the Internet	1.5
LIB 100	Introduction to Library Resources	1
SL 50	Beginning Sign Language	2

Choose six units from the following:

BASS 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: 41.5/42.5

*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.

MEDICAL TRANSCRIPTION-COURT REPORTING METHOD—237
CERTIFICATE OF ACHIEVEMENT

DIVISION / DEPARTMENT REQUIREMENTS		UNITS
BUSC 114	Medical Terminology for Machine Shorthand	3
BUSC 115	Medical Shorthand for Court Reporters	4
BUSC 119A	Beginning Computer-Aided Transcription	2
BUSC 119B	Intermediate Computer-Aided Transcription	2
BUSC 119C	Advanced Computer-Aided Transcription	2
BUSC 119E	Computer-Aided Medical Dictionary Build	2
BUSC 139	Exploring Career Opportunities in Court Reporting	1
*BUSC 145	Computerized Shorthand Speed Building III	3
BUSC 173/174	Business Court Reporting/Computerized Shorthand Occupational Work Experience	3/4
BUSC 190	Medical Transcription I/Court Reporting Method	3
BUSC 191	Medical Transcription II/Court Reporting Method	3
A&P 120	Introduction to Human Anatomy and Physiology	4
BASS 108	WordPerfect for Windows	3
or BASS 112	Microsoft Word for Windows	(3)
CIS 121	Introduction to the Internet	1.5
LIB 100	Introduction to Library Resources	1

Choose six units from the following:

BASS 162	Business Spelling and Proofreading Skills	3
BCOM 46	Business Communications	3
ENGL 50A	English Grammar	3
ENGL 53	Punctuation, Capitalization and Spelling	3
MA 161	Medical Terminology	3

TOTAL CERTIFICATE REQUIREMENTS: 43.5/44.5

*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

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		UNITS
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
BASS 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		UNITS
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 six units from the following:

BASS 162	Business Spelling and Proofreading Skills	3
BCOM 46	Business Communications	3
ENGL 50A	English Grammar	3
ENGL 53	Punctuation, Capitalization and Spelling	3

Choose three units from the following:

BASS 108	WordPerfect for Windows	3
BASS 112	Microsoft Word for Windows	3

TOTAL CERTIFICATE REQUIREMENTS: 29.5

*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		UNITS
BUSC 113	Legal Terminology	3
BUSC 119A	Beginning Computer-Aided Transcription	2
BUSC 119B	Intermediate Computer-Aided Transcription	2
BUSC 119C	Advanced Computer-Aided Transcription	2
BUSC 139	Exploring Career Opportunities in Court Reporting	1
*BUSC 145	Computerized Shorthand Speed Building III	3
BA 112	Business Law	3
BASS 108	WordPerfect for Windows	3
or BASS 112	Microsoft Word for Windows	(3)
CIS 121	Introduction to the Internet	1.5
ENGL 108	Vocabulary Building for Professionals	2
LIB 100	Introduction to Library Resources	1

Choose six units from the following:

BASS 162	Business Spelling and Proofreading	3
BCOM 46	Business Communications	3
ENGL 50A	English Grammar	3
ENGL 53	Punctuation, Capitalization and Spelling	3

TOTAL CERTIFICATE REQUIREMENTS: 29

*Minimum stenotype speed of 120 wpm.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements for a Certificate of Achievement in Text Entry Business-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		UNITS
BUSC 113	Legal Terminology	3
BUSC 116	Introduction to Courtroom Procedures	4
BUSC 119A	Beginning Computer-Aided Transcription	2
BUSC 119B	Intermediate Computer-Aided Transcription	2
BUSC 119C	Advanced Computer-Aided Transcription	2
BUSC 119F	Computer-Aided Legal Dictionary Build	2
BUSC 139	Exploring Career Opportunities in Court Reporting	1
*BUSC 146	Computerized Shorthand Speed Building (140-170 wpm)	3
AJ 101	Introduction to Administration of Justice	3
AJ 103	Criminal Procedures	3
AJ 220	Criminal Investigation	3
BASS 108	WordPerfect for Windows	3
or BASS 112	Microsoft Word for Windows	(3)
CIS 121	Introduction to the Internet	1.5
LIB 100	Introduction to Library Resources	1

Choose six units from the following:

BASS 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: 39.5

*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 units
Real Estate Certificate of Achievement	18/20 units
California Real Estate Certificate	25/26 units
A.A. Degree in Business Real Estate	60 units

REAL ESTATE DEPARTMENT AWARD - 12/13 UNITS

REQUIREMENTS		UNITS
BUSR 101	Real Estate Principles	3
BUSA 100	Introduction to Accounting	3
or BUSA 101	Fundamentals of Accounting I	(4)
BA 111	Business Law	3
BA 121	Sales	3
or BA 114	Marketing	(3)
or BA 110	Advertising	(3)

REAL ESTATE CERTIFICATE OF ACHIEVEMENT - 18/20 UNITS

Division/Department Requirements		UNITS
BUSR 101	Real Estate Principles	3
BUSR 173/174	Work Experience/Career Internship	3/4

Choose 12-13 units from the following:

BUSR 50	Introduction to Real Estate Software	3
BUSR 52	Mortgage Loan Brokering and Lending	3
BUSR 120	Real Estate Finance	3
BUSR 125	Legal Aspects of Real Estate	3
BUSR 130	Real Estate Practice	3
BUSR 131	Real Estate Appraisal	4

CALIFORNIA REAL ESTATE CERTIFICATE - 25/26 UNITS

State Requirements		UNITS
BUSR 101	Real Estate Principles	3
BUSR 120	Real Estate Finance	3
BUSR 125	Legal Aspects of Real Estate	3
BUSR 130	Real Estate Practice	3
BUSR 131	Real Estate Appraisal	4
BUSR 160	Real Estate Economics	3

Electives: Select a minimum of 6 units from the following courses:

BA 111	Business Law	3
BUSA 100	Introduction to Accounting	3
BUSA 101	Fundamentals of Accounting I	4
BUSR 50	Introduction to Real Estate Software	3
BUSR 52	Mortgage Loan Brokering and Lending	3
BUSR 173/174	Work Experience/Career Internship	3/4

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements for the California Real Estate Certificate and complete six units from the following: BA 121, BCOM 147, BUSF 125, BUSR 50, BUSR 51, BUSR 53, BUSR 140, BUSR 151 and complete general education requirements and electives to achieve a minimum of 60 units.

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

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

Real Estate License Requirements

1. Salesperson's License:

To qualify for a real estate Salesperson's License, an applicant must have completed a college-level course in Real Estate Principles. Those who must satisfy this new requirement must also (either prior to issuance of the original license or within eighteen months after issuance) complete two additional basic real estate courses selected from among the following:

Real Estate Practice
Legal Aspects of Real Estate
Real Estate Appraisal
Real Estate Finance
Accounting (any course)
Real Estate Economics
Business Law
Fundamentals of Escrow
R.E. Property Management
R.E. Office Administration
Mortgage Loan Brokering and Lending

2. Broker's License:

Applicants for a Broker's License must have completed eight 3-unit college-level courses in addition to the experience requirement*. These courses must include the following five courses:

Real Estate Practice — Legal Aspects of Real Estate
Real Estate Appraisal — R.E. Economics or Accounting
Real Estate Finance

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

R.E. Office Administration
Adv. Legal Aspects of R.E.
Advanced R.E. Appraisal
Practices of Escrow
Real Estate Principles
Business Law
Property Management
Fundamentals of Escrow
Mortgage Loan Brokering and Lending

*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

		UNITS
CHEM 111	General Chemistry	5
CHEM 112	General Chemistry	5
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

ADDITIONAL LOWER DIVISION REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Dominguez Hills*

CHEM 205	Quantitative Analysis Chemistry	4
MATH 220	Analytic Geometry and Calculus III	4

California State University - Fullerton*

PHYS 203	Engineering Physics	4

California State University - Long Beach*

BIOL 200	Principles of Biology	5
CHEM 205	Quantitative Analysis Chemistry	4
MATH 220	Analytic Geometry and Calculus III	4
PHYS 203	Engineering Physics	4

Foreign Language: A competence is encouraged in reading scientific German, French, Russian, Chinese or Japanese.

California Sate 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
PHYS 203	Engineering Physics	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

		UNITS
ART 106	Mexican Art	3
ENGL 225	Mexican Literature in Translation	3
SPAN 111	Elementary Spanish for Spanish Speakers	5
SPAN 112	Elementary Spanish for Spanish Speakers	5
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.

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 Cerritos College Graduation Requirements.
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 the 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, 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

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. *

COURSES		UNITS
CD 110	Child Development	3
CDEC 66	Administration and Supervision of Early Childhood Education Programs	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

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. *

COURSES		UNITS
CD 50	Arts and Crafts for School-Age Children	2
CD 110	Child Development	3
CD 115	Parent School Partnerships	3
CDEC 61	Nutrition, Health, & Safety in Children's Programs	2
CDEC 63	Early Childhood Experiences in Language Arts and Social Sciences	2
CDEC 113	The Child, Family, and Community	3
CDSA 152	School-Age Child Care Supervision and Administration	3
CDSA 155	School-Age Child Care Activities	3
CDSA 259	School-Age Child Care Practicum	3

INFANT / TODDLER TEACHER:
VERIFICATION OF COMPLETION (15 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. *

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
CDIT 50	Infant/Toddler Care Giving	3

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. *

COURSES		UNITS
CD 110	Child Development	3
CDFC 10	Family Child Care Providers	3
CDEC 61	Nutrition, Health & Safety in Children's Programs	2

Choose one (1) of the following courses:

CDSA 155	School-Age Child Care Activities	3
CDEC 111	Principles and Practices in Early Childhood Education	3
CDIT 50	Infant/Toddler Care Giving	3

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. *

		UNITS
CD 110	Child Development	3
CD 124	The Child in a Pluralistic Society	3
CD 137	Positive Child Guidance	1.5
CD 138	Observation and Assessment of Childhood Behavior	1.5
CDEC 111	Principles and Practices in Early Childhood Education	3
CDEC 112	Early Childhood Education Curriculum	3
CDEC 113	The Child, Family, and Community	3
CDEC 61	Nutrition, Health, and Safety in Children's Programs	2
CDEC 62	Creativity and the Preschool Child	2
CDEC 63	Early Childhood Experiences in Language Arts and Social Sciences	2
CDEC 64	Early Childhood Education Practicum	3
CDEC 65	Music and Movement for Young Children	2
CDEC 133	Early Childhood Experiences in Math and Sciences	2
CDEC 273 (or)274	Early Childhood Education Occupational Work Experience	3-4

Choose (1) of the following courses:

CD115	Parent School Partnerships	3
CDIT 50	Infant/Toddler Care Giving	3
CDSA 155	School-Age Child Care Activities	3
CDSE 50	Survey of Special Education	3
CDEC 230	Adult Supervision in Child Care Programs	3

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 50, CDSA 155, 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:

		UNITS
CDEC 66	Administration and Supervision of Early Childhood Education Programs	3
CDEC 67	Advanced Administration and Supervision of Early Childhood Education Programs	3
CDEC 230	Adult Supervision in Child Care Programs	3

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 50, CDSA 155, CDPE 10, EDT 1, EDT 3, EDT 7.

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 / INSTRUCTIONAL AIDE—969
CERTIFICATE OF ACHIEVEMENT

		UNITS
CDIA 90	Intro. to Elementary and Secondary Classroom Experiences	3
CDIA 91	The Child in the Elementary and Secondary School Environment	3
*CDIA 99	Instructional Aide Practicum	3
CD 110	Child Development	3
CD 50	Arts & Crafts for School-Age Children	2
CD 124	The Child in a Pluralistic Society	3
CD 137	Positive Child Guidance	1.5
CD 138	Observation and Assessment of Childhood Behavior	1.5
CDEC 65	Music and Movement for Young Child	2
EDT 1	Windows for Educators	1
EDT 3	Integration of the Internet to the Curriculum-Part 1	1
EDT 7	Word for Educators	1
TOTAL CERTIFICATE REQUIREMENTS:		25

CDIA 99 requires of the student 6 hours per week in a school environment, normally during daytime hours.

*If currently employed as an Instructional Aide, enroll in CDIA 73 or CDIA 74.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements for a Certificate of Achievement for Instructional Aide. Plus, for an A.A. Degree a student must complete electives and general education requirements to achieve a minimum of 60 units.

CAREER OPPORTUNITIES: Employment as an Instructional Aide in a classroom situation.

See Cerritos College Graduation Requirements.

CHILD DEVELOPMENT / INSTRUCTIONAL AIDE BILINGUAL / BICULTURAL—512
CERTIFICATE OF ACHIEVEMENT

The following Instructional Aide Program of Study is a non-transfer program. It has been designed to prepare students for a Certificate of Achievement and/or an Associate in Arts Degree. Students seeking a Bachelor's Degree in order to become a teacher are referred to the BILINGUAL EDUCATION Transfer Program (509)

		UNITS
CDIA 90	Intro. to Elementary and Secondary Classroom Experience	3
CDIA 91	The Child in the Elementary and Secondary School Environment	3
*CDIA 99	Instructional Aide Practicum	3
CD 50	Arts and Crafts for School-Age Children	2
CD 110	Child Development	3
CD 124	The Child in a Pluralistic Society	3
CD 137	Positive Child Guidance	1.5
CD 138	Observation and Assessment of Childhood Behavior	1.5
ENGL 106	Introduction to Language Study	3
SPAN 111	Elementary Spanish for Spanish Speakers	5
SPAN 112	Elementary Spanish for Spanish Speakers	5
SPAN 245	Intro. to Chicano/Mexican American Culture	3
TOTAL CERTIFICATE REQUIREMENTS:		36

*Students currently employed as an Instructional Aide enroll in CDIA 73 or CDIA 74.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the above requirements for Certificate of Achievement in Instructional Aide, (2) complete SPAN 201, and (3) complete the Associate in Arts General Education requirements to achieve a minimum of 60 units.

CAREER OPPORTUNITIES: Employment as an assistant to a certificated teacher in a Bilingual/Bicultural classroom situation. Employment opportunities are increasing as more emphasis is being placed on Bilingual Education.

See Cerritos College Graduation Requirements.

CHILD DEVELOPMENT / SPECIAL EDUCATION—966
CERTIFICATE OF ACHIEVEMENT

		UNITS
CD 50	Arts and Crafts for School-Age Children	2
CD 110	Child Development	3
CD 124	The Child in a Pluralistic Society	3

CD 137	Positive Child Guidance	1.5
CD 138	Observation and Assessment of Childhood Behavior	.5
CDSE 50	Survey of Special Education	3
CDEC 133	Early Childhood Experiencesin Math and Sciences	2
*CDSE 51	Special Education Environment	3
SL 50	Beginning Sign Language	2
PSYC 101	General Introductory Psychology	3
HO 50	Emergency & Safety Management	2
TOTAL CERTIFICATE REQUIREMENTS:		26

*If currently employed as a Special Education Assistant, enroll in CDSE 73 or CDSE 74.

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

DIVISION / DEPARTMENT REQUIREMENTS		UNITS
CIS 102	Introduction to Microcomputer Systems for Business	3
or CIS 101	Introduction to Business Computer Information Systems	(3)
CIS 141	AS/400 Operations	3
CIS 52*	Data Processing Mathematics	3
CIS 103	Computer Programming Logic	3
CIS 240	AS/400 Control Language Programming	3
BCOM 147**	Business Communications	3

Choose fifteen units from the following courses:

CIS 51	Data Entry	2
CIS 56	Microcomputer Disk Operating Systems	3
CIS 57	Advanced Topics in Microcomputer Disk Operating Systems	3
CIS 105	Windows 95	1.5
CIS 121	Introduction to Internet	1.5
CIS 140	Query/400	1
CIS 170	Programming in BASIC	3
CIS 175	RPG Programming	3
CIS 176	COBOL Programming	3
CIS 180	Programming in C/C++	3
CIS 195	Business Data Communications Systems	3
CIS 201	Systems Analysis and Design	3
CIS 207	SQL Programming	3
CIS 210	Local Area Networks	3
CIS 212	Microsoft Windows NT	3
CIS 214	UNIX	3
CIS 220	Windows Programming	3
CIS 173/174	BCIS Occupational Work Experience	3/4
TOTAL CERTIFICATE REQUIREMENTS:		33

*Meets general education requirement, may substitute MATH 60

**Meets A.A. Degree general education requirements, 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 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 CertificateA.A. Degree is nontransferable.

COMPUTER AND INFORMATION SCIENCES PROGRAMMER—284
CERTIFICATE OF ACHIEVEMENT

DIVISION / DEPARMENT REQUIREMENTS		UNITS
CIS 52*	Data Processing Mathematics	3
CIS 101	Introduction to Business Computer Information Systems	3
or CIS 102	Introduction to Microcomputer Systems for Business	(3)
CIS 103	Computer Programming Logic	3
CIS 179	Visual BASIC Programming	3
or CIS 180	Programming in C/C++	(3)
or CIS 182	JAVA Programming	(3.5)
CIS 175	RPG Programming	3
or CIS 176	COBOL Programming	(3)
CIS 207	SQL Programming	3
or CIS 253	Client/Server Development with Powerbuilder	(3)
CIS 222	Advanced RPG Programming	3.5
or CIS 224	Advanced COBOL Programming	(3)
or CIS 221	Advanced Visual Basic	(3.5)
or CIS 280	Object-Oriented Programming in C++	(3)
or CIS 282	Advanced JAVA Programming	(3.5)
BCOM 147**	Business Communications	3

Choose 12 units from the following courses:

CIS 105	Windows 95	1.5
CIS 121	Introduction to Internet	1.5
CIS 125	JAVASCRIPT Programming	1.5
CIS 140	Query/400	1
CIS 141	AS/400 Operations	3
CIS 170	Programming in BASIC	3
CIS 179	Visual BASIC Programming	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 207	SQL Programming	3
CIS 210	Local Area Networks	3
CIS 212	Microsoft Windows NT	3
CIS 214	UNIX	3
CIS 220	Windows Programming	3
CIS 221	Advanced Visual Basic	3.5
CIS 222	Advanced RPG Programming	3.5
CIS 224	Advanced COBOL Programming	3
CIS 253	Client/Server Development with Powerbuilder	3
CIS 173/174	BCIS Occupational Work Experience	3(4)
CIS 280	Object-Oriented Programming in C++	3
CIS 282	Advanced JAVA Programming	3.5
CIS 284	CGI and PERL Programming	3.5
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**
CIS 52*	Data Processing Mathematics	3
CIS 53	Microsoft Powerpoint	1.5
CIS 101	Introduction to Business Computer Information Systems	3
or CIS 102	Introduction to Microcomputer Systems for Business	(3)
CIS 103	Computer Programming Logic	3
CIS 195	Business Data Communications Systems	3
CIS 201	Systems Analysis and Design	3
CIS 251	Advanced Systems Analysis and Design	3
CIS 253	Client/Server Development with Powerbuilder	3
or CIS 155	Microsoft Access	(3)
BCOM 147**	Business Communications	3

Choose 6 units from the following courses:

CIS 56	Microcomputer Disk Operating Systems	3
CIS 141	AS/400 Operations	3
CIS 151	Microsoft Excel	3.5
CIS 179	Visual BASIC Programming	3
CIS 207	SQL Programming	3
CIS 210	Local Area Networks	3
CIS 212	Microsoft Windows NT	3

Choose 6 units from the following courses:

CIS 110	Introduction to Desktop Publishing Microsoft Publisher	1.5
CIS 121	Introduction to Internet	1.5
CIS 141	AS/400 Operations	3
CIS 151	Microsoft Excel	3.5
CIS 155	Microsoft Access	3
CIS 179	Visual BASIC Programming	3
CIS 175	RPG Programming	3
CIS 176	COBOL Programming	3
CIS 180	Programming in C/C++	3
CIS 205	Programming in HTML for the World Wide Web	1.5
CIS 207	SQL Programming	3
CIS 210	Local Area Networks	3
CIS 212	Microsoft Windows NT	3
CIS 214	UNIX	3
CIS 220	Windows Programming	3
CIS 222	Advanced RPG Programming	3.5
CIS 224	Advanced COBOL Programming	3
CIS 253	Client/Server Development with Powerbuilder	3
CIS 173/174	BCIS Occupational Work Experience	3(4)
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 Systems for Business	3
CIS 103	Computer Programming Logic	3
CIS 105	Windows 95	1.5
CIS 151	Microsoft Excel	3.5
CIS 155	Microsoft Access	3
CIS 179	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 173/174	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.

COMPUTER AND INFORMATION SCIENCES IBM AS/400 SPECIALIST—287
CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS		UNITS
CIS 52*	Data Processing Mathematics	3
CIS 103	Computer Programming Logic	3
CIS 140	QUERY/400	1
CIS 141	AS/400 Operations	3
CIS 175	RPG Programming	3
CIS 222	Advanced RPG Programming	3.5
CIS 240	AS/400 Control Language Programming	3
BCOM 147**	Business Communications	3

Choose 2.5-3.0 units from the following courses:

CIS 70A	Network Fundamentals	2.5
CIS 121	Introduction to the Internet	1.5
CIS 179	Visual Basic Programming	3
CIS 176	COBOL Programming	3
CIS 180	Programming in C/C++	3
CIS 182	Java Programming	3.5
CIS 195	Business Data Communications Systems	3
CIS 207	SQL Programming	3
CIS 173/174	BCIS Occupational Work Experience	3/4
TOTAL CERTIFICATE REQUIREMENTS:		25/25.5

*Meets general education requirement, may substitute MATH 60

**Meets A.A. Degree general education requirement, may substitute ENGL 100

NOTE: CIS 52 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 IBM AS/400 Specialist and complete general education requirements and electives to achieve a minimum of 60 units.

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

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
BCOM 147**	Business Communications	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 179	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 102	Analytic Geometry and Calculus I	4
MATH 103	Analytic Geometry and Calculus II	4

California State University - Dominguez Hills

CIS 177	Programming in Pascal	4
CIS 230	Assembly Programming for Microcomputers	4
CIS 292	Data Structures	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-Orientated Programming in C++	(3)
EL 134	Digital Circuits and Computer logic	3
ENGL 100	Freshman Composition	3
ENGL 102	Freshman Composition and Literature	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	4
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

		UNITS
CIS 214	Unix	3
CIS 230	Assembly Programming for Microcomputers	4
CIS 280	Object-Orientated 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)
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 230	Assembly Programming for Microcomputers	4
CIS 292	Data Structures	4
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-Orientated Programming in C++	3
or CIS 125	JavaScript Programming	(1.5)
AND CIS 182	Java Programming	(3.5)
MATH 220	Analytical Geometry and Calculus III	4
MATH 240	Calculus and Differential Equations	4

University of California - Los Angeles

CIS 180	Programming in C/C++	3
CIS 280	Object-Orientated Programming in C++	3
ENGL 103	Critical Argumentative Writing	3
MATH 220	Analytical Geometry and Calculus III	4
MATH 240	Calculus and Differential Equations	4
PHYS 201	Engineering Physics	4
PHYS 202	Engineering Physics	4
PHYS 203	Engineering Physics	4

Four courses from across the following categories: Humanities, Social Sciences, and Fine Arts. One Life Science course. Contact counselor for assistance in selecting these courses.

ASSOCIATE IN ARTS 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: Computer science graduates are primarily prepared for the area of software design. Graduates usually are recruited by hardware manufacturers and are then involved in the design of vendor supplied software, such as compilers, operating systems, and utility programs.

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

COSMETOLOGY—880

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements of a Certificate of Achievement in Cosmetology.

Additional coursework will be necessary to complete Cerritos College Graduation Requirements and achieve the minimum of 60 units.

The cosmetology curriculum consists of a minimum of 1600 clocked hours of cosmetology class work. The curriculum prepares the student for the State Board of Cosmetology Examination.

Students enrolling in the Cosmetology Program should contact the Cosmetology Department or a Cosmetology counselor for information regarding the cost of the kit, uniforms, and books.

Students may complete the Cosmetology Program by enrolling in one of the following plans:

FULL TIME DAYS: The full-time day student may complete the 1600-hour program by (1) two regular semesters and one eight-week summer session over a period of one calendar year, or (2) three regular semesters over a period of one and one-half years.

EVENINGS: Students enrolling in this plan attend class 5:30 p.m.-10:30 p.m. Monday through Thursday. It requires approximately five or six semesters to complete the 1600-hour program.

MAJOR REQUIREMENTS

FULL TIME (8:30 a.m. to 5:00 p.m. Monday through Friday)

		UNITS
COS 50	Introductory Cosmetology	19.5
COS 51	Intermediate Cosmetology	19.5
COS 52	Advanced Cosmetology	19.5
		58.50

PART TIME EVENING (5:30-10:30 p.m. Monday through Thursday)

		UNITS
COS 60A	Introductory Cosmetology Theory & Manipulation	10
COS 60B	Introductory Cosmetology II	10
COS 61A	Intermediate Cosmetology I	10
COS 61B	Intermdiate Cosmetology II	10
COS 62A	Advanced Cosmetology I	10
COS 62B	Advanced Cosmetology II	10
		60

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.

CERTIFICATE OF ACHIEVEMENT		UNITS
COS 50	Introductory Cosmetology	19.5
COS 51	Intermediate Cosmetology	19.5
COS 52	Advanced Cosmetology	19.5
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

UNITS		
CA 52	Food Production	9.5
CA 53	Commercial Food Production: Pantry Items	9.5
CA 54	Commercial Food Production: Meats & Poultry	9.5
CA 60	Foods Purchase and Control	3
CA 101	Introduction to Food Service Safety & Sanitation	2
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 set of knives and two sets of uniforms.

CAREER OPPORTUNITIES: Employment in foods industry as sous chef, chef steward. Also short order cook, pantry person, garde helper, roast cook.

See Cerritos College Graduation Requirements.

CULINARY ARTS PROFESSIONAL BAKING—955 CERTIFICATE OF ACHIEVEMENT PROGRAM

CA 60-Foods Purchase and Control		3
CA 80	Introduction to Baking Skill	4
CA 81	Professional Baking & Pastry Production I	5
CA 82	Professional Baking & Pastry Production II	5
CA 85	Advanced Professional Pastry Design & Decorating	3
CA 101	Introduction to Food Service Safety & Sanitation	2
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		**UNITS**
PE 182A	Modern Dance (Beginning)	2
PE 182B	Modern Dance (Intermediate)	2
PE 186A	Ballet (Beginning)	2
PE 186B	Ballet (Intermediate)	2
PE 191	History of Dance	3
TH 140	Theatre Dance - Beginning Jazz	2
TH 141	Theatre Dance - Intermediate Jazz	2

LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Fullerton:

PE 184	Choreography Improvisation	3
PE 187	Dance Repertory	2
PE 188	Dance Performance	2

University of California - Irvine:

Dance (All emphases)

PE 191	History of Dance (lecture)	3

Choreography Emphasis

PE 184	Choreography Improvisation	3
PE 190	Dance Notations (lecture)	3
TH 110	Fundamentals of Acting	3

History Emphasis

PE 184	Choreography Improvisation	3
PE 190	Dance Notations (lecture)	3

Performance Emphasis

PE 184	Choreography Improvisation	3
PE 190	Dance Notations (lecture)	3
TH 110	Fundamentals of Acting	3

Teaching Emphasis

PE 184	Choreography Improvisation	3
PE 190	Dance Notations (lecture)	3

*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		UNITS
DA 51	Applied Dental Science I	4
DA 52	Dental Radiography I	2
DA 53	Introduction to Chairside Assisting	3
DA 54	Introduction to Operatory Procedures	4
		13
SECOND SEMESTER		
DA 61	Applied Dental Science II	3
DA 62	Dental Radiography II	2
DA 63	Advanced Chairside Assisting	4
DA 64	Dental Office Management	2
DA 65	Clinical I Dental Schools	3
		14
SUMMER SESSION		
DA 75	Clinical II Cooperative Office Training	5
		5
TOTAL CERTIFICATE REQUIREMENTS:		32

To earn a Certificate of Achievement, a student must (a) verify typing proficiency by taking a college typing or computer course with a "C" or better grade or receive a "B" or better in a high school typing or computer course, (b) achieve a satisfactory score in English on the College Placement Test or clear deficiencies, and (c) submit evidence of a current Basic Life Support CPR Certificate to the Dental Assisting counselor.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet all the requirements as listed for a Certificate of Achievement in Dental Assisting. For an 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 dental offices and dental clinics; federal, state and local health departments or associated institutions; hospitals and nursing homes; school districts or departments of education; educational programs for dental, dental hygiene and dental assisting students; private business/industry; correctional facilities; private and public centers for pediatric, geriatric and other individuals/groups with special needs; or health maintenance organizations.

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, analyze, and evaluate client's charts in order to provide appropriate treatment. Applicants must be able to record in patient's charts and have the dexterity to use small dental instruments to provide dental hygiene care.

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.

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

Applicants must present evidence of physical fitness to succeed in the program. These forms will be issued to those applicants who are accepted into the program. Annual update of immunizations and tuberculosis testing is required and is the financial responsibility of the student.

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 $1750 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 $30 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		
DH 110	Preventive Dentistry I	2
DH 111	Infection Control & Dental Office Emergencies	2
DH 112	Dental Hygiene Radiography	2
DH 114	Dental Hygiene Clinical Sciences I	2
DH 115C	Pre-Clinical Dental Hygiene I	2
DH 116	Head & Neck Anatomy	2
DH 119	Dental Embryology, Histology and Anatomy	2
Second Semester		
DH 120	Preventive Dentistry	2
DH 125	Dental Hygiene Clinical Sciences II	2
DH 125C	Clinical Dental Hygiene II	3
DH 126	General & Oral Pathology	2
DH 127	Pharmacology	2
DH 128	Management of Pain	2
DH 129	Applied Periodontics	2
SUMMER SESSION		
DH 150L	Clinical Dental Hygiene IIA	1
SECOND YEAR		
First Semester		
DH 232	Dental Materials Laboratory	1
DH 234	Dental Care for the Special Patient	2
DH 235	Dental Hygiene Clinical Sciences III	2
DH 235C	Clinical Dental Hygiene III	4
DH 238L	Community Dental Health Laboratory I	1
DH 239	Dental Health Education & Research I	2

Second Semester

DH 244	Ethical Issues in Dental Hygiene	2
DH 245	Dental Hygiene Clinical Sciences IV	2
DH 245C	Clinical Dental Hygiene IV	4
DH 248L	Community Dental Health Laboratory II	1
DH 249	Dental Health Education & Research II	2

SUMMER SESSION - OPTIONAL

DH 250L	Clinical Dental Hygiene V	1

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:

		UNITS
BIOL 200	Principles of Biology	5
BIOL 201	Principles of Biology	5
or A&P 200	Human Anatomy	(5)
or A&P 201	Human Physiology	(5)
CHEM 111	General Chemistry	5
CHEM 112	General Chemistry	5
CHEM 211	Organic Chemistry	5
ENGL 100	Freshman Composition	3
ENGL 102	Freshman Composition and Literature	3
PSYC 101	General Introductory Psychology	3
SOC 101	Introductory Sociology Principles	3
SPCH 100	Fundamentals of Oral Communication	3

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 needed in preparation 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

REQUIRED COURSES		UNITS
DRAF 51	Advanced Applications of Computer Aided Drafting and Design Using AutoCAD	4
DRAF 55	AutoCAD Rendering and Solid Modeling Applications	4
DRAF 56	Introduction to AutoCAD Mechanical Desktop	4
DRAF 57	Advanced Application of AutoCAD Mechanical Desktop	4
DRAF 117	Geometrical Dimensioning and Tolerancing	2
DRAF 133	Sheet Metal Layout & Applications	2
DRAF 138	Fundamentals of Computer Aided Drafting	4
DRAF 153	Machine Drawing and Design with AutoCAD	3
DRAF 237	Graphical Statics & Strength of Materials	3
DRAF 254	AutoCAD Solid Modeling and 3D	4
MFGT 100	Manufacturing Processes	3
TM 50	Technical Mathematics	3
or MATH 60	Elementary Algebra	(4)
MTT 100	Modern Manufacturing Concepts and Techniques	2.5
TOTAL CERTIFICATE REQUIREMENTS:		42.5 (43.5)

MECHANICAL DRAFTING OPTION—819

Above courses required plus both DRAF 258 and MET 100A

DRAF 258	Design & Production Technology	4
MET 100A	Metallurgy 1	3
TOTAL CERTIFICATE REQUIREMENTS:		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: MFGT 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

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY

		UNITS
ECON 201	Principles	3
ECON 202	Principles	3

ADDITIONAL LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Dominguez Hills
General Economics:

MATH 112	Elementary Statistics	3
MATH 102	Analytic Geometry and Calculus I	4
or BUSA 101	Fundamentals of Accounting I	(4)
AND BUSA 102	Fundamentals of Accounting II	(4)

Quantitative Economics:

MATH 116	Calculus for Managerial, Biological and Social Sciences	4
CIS 101	Introduction to Business Computer Information Systems	3
or CIS 170	Programming in BASIC	(3)

California State University - Fullerton

BUSA 101	Fundamentals of Accounting I	4
AND BUSA 133	Spreadsheet Accounting I	3
CIS 101	Introduction to Business Computer Information Systems	3
MATH 116	Calculus for Managerial, Biological and Social Sciences	4
or MATH 102	Analytic Geometry and Calculus I	(4)

CSUF also requires a lower division business writing course not offered at Cerritos College.

California State University - Long Beach

BUSA 101	Fundamentals of Accounting I	4
MATH 116	Calculus for Managerial, Biological, and Social Sciences	4
or MATH 102	Analytic Geometry and Calculus	(4)

A minimum of two courses outside economics are also required totaling six (6) or more units. Students should see a counselor for these options.

California State University - Los Angeles
Applied Economics:

BUSA 101	Fundamentals of Accounting I	4
AND BUSA 102	Fundamentals of Accounting II	4
CIS 101	Introduction to Business Computer Information Systems	3
MATH 102	Analytic Geometry and Calculus I	4
MATH 112	Elementary Statistics	4

Social and Behavioral Sciences:

BUSA 101	Fundamentals of Accounting I	4
AND BUSA 102	Fundamentals of Accounting II	4
MATH 112	Elementary Statistics	4
MATH 116	Calculus for Managerial, Biological and Social Sciences	4

COMMON LOWER DIVISION PREPARATION FOR THE UNIVERSITY OF CALIFORNIA

ECON 201	Principles	3
ECON 202	Principles	3

ADDITIONAL LOWER DIVISION PREPARATION FOR SPECIFIC INSTITUTION
University of California - Los Angeles

ENGL 102	Freshman Composition and Literature	3
or ENGL 103	Critical and Argumentative Writing	(3)
MATH 102	Analytic Geometry and Calculus I	4
MATH 103	Analytic Geometry and Calculus II	4
MATH 112	Elementary Statistics	4

University of California - Irvine

CIS 101	Introduction to Business Computer Information Systems	3
or CIS 103	Computer Programming Logic	(3)
or 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
MATH 240	Calculus and Differential Equations	4

UC Irvine also requires two (2) introductory courses in disciplines other than economics. In addition, UC Irvine requires an additional social science course, which may include introductory courses not taken above. Students should consult counselors for specific courses.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete ECON 201 & 202 and MATH 80 (or equivalent) plus related coursework to be selected in consultation with a counselor to meet the 18 unit minimum and the AA degree general education requirements for a total of at least 60 units

CAREER OPPORTUNITIES: Economics find employment in business, industry and government as price and market analysts, planning consultants and related occupations.

See Cerritos College Graduation Requirements.

EDUCATIONAL TECHNOLOGY PROGRAM

EDUCATIONAL TECHNOLOGY—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

		UNITS
Take one of the following:		
EDT 1	Microsoft Windows for Educators	1
or EDT 2	Macintosh for Educators	(1)

Take all of the following:

EDT 4	Integration of the Internet to the Curriculum - Advanced	1
EDT 5	Integration of the Internet to the Curriculum Curriculum Projects	1
EDT 6	E-mail for Educators	1
EDT 7	Microsoft WORD for Educators - Part 1	1
EDT 9	PowerPoint for Educators	1
EDT 11	Spread Sheets for Educators using Excel	1
EDT 12	Database Management Systems using Access	1
EDT 14	Web Design Using FrontPage	1
EDT 16	Fundamentals of Teaching Online Courses	1
		10

Additional Requirements

You must complete 8 units in this area:

Take one of the following not taken under Major Requirements above:

EDT 1	Introduction to Microsoft Windows	1
or EDT 2	Introduction to MAC Operating System	(1)

Take 7 units from the following:

EDT 8	Microsoft WORD for Educators - Part 2	1
EDT 10	PowerPoint for Educators - Part 2	1
EDT 43	EdTech Occupational Work Experience	3
EDT 15	Issues in Hardware Evaluation and Troubleshooting	1
EDT 17	Computers Integration into the Math and Science Curriculum	1
EDT 19	Fundamentals of Teleconferencing	1
ART 52	Introduction to Designing Web Graphics	3
CIS 50	Computer Literacy	.5
CIS 121	Introduction to Internet	1.5
PHOT 112	Intermediate Digital Photography	3
Total 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

		UNITS
Take one of the following:		
EDT 1	Microsoft Windows for Educators	1
or EDT 2	Macintosh for Educators	(1)
Take all of the following:		
EDT 3	Integration of the Internet to the Curriculum - Introduction	1
EDT 9	PowerPoint for Educators	1
EDT 10	PowerPoint for Educators - Part 2	1
EDT 14	Web Design Using FrontPage	1
EDT 15	Issues in Hardware Evaluation and Troubleshooting	1
EDT 16	Fundamentals of Teaching Online Courses	1
EDT 18	Desktop Publishing Using Microsoft Publisher	1
EDT 19	Fundamentals of Teleconferencing	1
EDT 82	Interactive Multi-media in Curriculum	1
		10

Additional Requirements.

You must complete 8 units in this area:

Take one of the following not taken under Major Requirements above:

EDT 1	Introduction to Microsoft Windows	1
or EDT 2	Introduction to MAC Operating System	(1)

Take 7 units from the following:

EDT 4	Integration of the Internet to the Curriculum - Advanced	1
EDT 5	Integration of the Internet to the Curriculum- Curriculum Projects	1
EDT 8	Microsoft WORD for Educators - Part 2	1
EDT 16	Fundamentals of Teaching Online Courses	1
EDT 17	Computers Integration into the Math and Science Curriculum	1
EDT 43	EdTech Occupational Work Experience	3
ART 52	Introduction to Designing Web Graphics	3
CIS 50	Computer Literacy	.5
CIS 121	Introduction to Internet	1.5
PHOT 112	Intermediate Digital Photography	3
Total 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 enchance their teleconferenceing 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.

Major Requirements: You must complete 13 units in this area

		UNITS
Take one of the following:		
EDT 1	Microsoft Windows for Educators	1
or EDT 2	Macintosh for Educators	(1)
Take all of the following:		
EDT 15	Issues in Hardware Evaluation and Troubleshooting	1
EDT 19	Fundamentals of Teleconferencing	1
EDT 20	Teleconferencing for Small Groups	2
EDT 21	Teleconference Telematics	1
EDT 22	Teleconference Event Review and Evaluation	1
EDT 23	Teleconference Production Studio	3
EDT 24	Teleconference Portfolio Workshop	3
		13

Additional Requirements:
You must complete 5 units in this area:

EDT 1	Microsoft Windows for Educators	1
EDT 2	Macintosh for Educators	(1)
EDT 4	Integration of the Internet to the Curriculum - Advanced	1
EDT 5	Integration of the Internet to the Curriculum-Curriculum Projects	1
EDT 8	Microsoft WORD for Educators - Part 2	1
EDT 9	PowerPoint for Educators	1
EDT 10	PowerPoint for Educators - Part 2	1
EDT 43	EdTech Occupational Work Experience	3
EDT 14	Web Design Using FrontPage	1
EDT 16	Fundamentals of Teaching Online Courses	1
EDT 17	Computers Integration into the Math and Science Curriculum	1
ART 52	Introduction to Designing Web Graphics	3
CIS 50	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 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.

ELECTRONICS TECHNOLOGY—830 ASSOCIATE IN ARTS DEGREE

ELECTRONICS PROGRAM BASIC CORE COURSES		UNITS
EL 50	Electronic Tests and Measurements	1.5
EL 60	Computer Aided Circuit Analysis	1.5
EL 110	Principles of DC Electronics	4
EL 110L	DC Electronics Laboratory	1
EL 114	Fundamentals of Digital Electronics	3
EL 114L	Fundamentals of Electronics Lab	1
EL 120	Principles of AC Electronics	4
EL 120L	AC Electronics Laboratory	1
EL 124	Advanced Digital Electronics	3
EL 124L	Advanced Digital Electronics Lab	1
EL 200	Electronic Circuit Analysis	3
EL 200L	Circuit Analysis Laboratory	1
EL 210	Electronics Systems Analysis	3
EL 210L	Electronics Systems Laboratory	1
EL 244	Introduction to Microcomputers	4
TOTAL UNITS:		33

COREQUISITES IN MATHEMATICS

TM 50	Technical Mathematics	3
or MATH 140	Trigonometry	3

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.

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 CERTIFICATE OF ACHIEVEMENT

ELECTRONICS PROGRAM BASIC CORE COURSES		UNITS
EL 60	Computer Aided Circuit Analysis	1.5
EL 50	Electronic Tests and Measurements	1.5
EL 110	Principles of DC Electronics	4
EL 110L	DC Electronics Laboratory	1
EL 114	Fundamentals of Digital Electronics	3
EL 114L	Fundamentals of Electronics Lab	1
EL 120	Principles of AC Electronics	4
EL 120L	AC Electronics Laboratory	1
EL 124	Advanced Digital Electronics	3
EL 124L	Advanced Digital Electronics Lab	1
EL 200	Electronic Circuit Analysis	3
EL 200L	Circuit Analysis Laboratory	1
EL 244	Introduction to Microcomputers	4
TOTAL UNITS:		29

COREQUISITES IN MATHEMATICS

TM 50	Technical Mathematics	3
or MATH 140	Trigonometry	3

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 210	Electronics Systems Analysis	3
EL 210L	Electronics Systems Laboratory	1

And six (6) units selected from the following courses:

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
EL 96A	Introduction to Automated Manufacturing	4
TOTAL UNITS:		10 (42)

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

And six (6) units selected from the following courses:

EL 64A	Introduction to Telecommunications Electronics	3
EL 64.B	Advanced Telecommunications Electronics	3
EL 94	Introduction to Digital Signal Processing	3
EL 96A	Introduction-Automated Manufacturing	4
EL 212	Electronics Communications	3
EL 212L	Electronics Communications Lab	1
EL 220	Electronic System Analysis	3
EL 220L	Electronic System Analysis Lab	1
TM 54	Math for Computer Technology	4
CIS 101	Introduction to Business Computer Information Systems	3
CIS 102	Introduction to Microcomputers Using Microsoft Office	3
CIS 103	Computer Programming Logic	3
CIS 180	Programming in C/C++	3
CIS 210	Local Area Networks	3
CIS 212	Microsoft Windows NT	3
TOTAL UNITS:		9 (41)

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 64A	Introduction to Telecommunications Electronics	3
EL 64B	Advanced Telecommunications Electronics	3

And six (6) units selected from the following courses:

EL 94	Digital Signal Processing	3
El 212	Electronic Communication	3
EL 212L	Electronic Communication Lab	1
EL 220	Electronic System Analysis	3
EL 220L	Electronic System Analysis Lab	1
TM 54	Math for Computer Technology	4
CIS 101	Introduction to Business Computer Information Systems	3
CIS 102	Introduction to Microcomputers Using Microsoft Office	3
CIS 103	Computer Programming Logic	3
CIS 180	Programming in C/C++	3
CIS 210	Local Area Networks	3
CIS 212	Microsoft Windows NT	3
TOTAL UNITS:		12 (44)

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 TechnologyAutomated Manufacturing—839.

See Cerritos College Graduation Requirements.

ENGINEERING—615 TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY

		UNITS
CHEM 111	General Chemistry	5
ENGR 112	Engineering Graphics	3
MATH 102	Analytic Geometry and Calculus I	4
MATH 103	Analytic Geometry and Calculus II	4
MATH 220	Analytic Geometry and Calculus III	4

PHYS 201	Engineering Physics	4
PHYS 202	Engineering Physics	4

ADD THIS CLASS FOR THE UNIVERSITY OF CALIFORNIA,

MATH 240	Calculus and Differential Equations	4

Schools of engineering have similar basic science requirements but differ widely in the preparation for the various engineering options available. The following science, engineering, 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.

BIOL 200	Principles of Biology	5
BIOL 201	Principles of Biology	5
CHEM 112	General Chemistry	5
CHEM 205	Quantitative Analysis Chemistry	4
CHEM 211	Organic Chemistry	5
CHEM 212	Organic Chemistry	5
CIS 180	Programming in C/C++	3
CIS 280	Object-Oriented Programming in C++	3
CIS 178	Programming in Fortran	3
CIS 230	Assembly Programming for Microcomputers	4
CIS 177	Programming in Pascal	4
CIS 292	Data Structures	4
DRAF 138	Fundamentals of Computer Aided Drafting	4
EL 114	Fundamentals of Digital Electronics	3
EL 114L	Fundamentals of Digital Electronics Lab	1
ENGR 115	Engineering Electric Circuits	3
ENGR 123	Descriptive Geometry	3
ENGR 135	Statics	3
MATH 240	Calculus and Differential Equations	4
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

(CSUF) Has a common core of courses for the first two and one-half years. During the last two years the student selects engineering courses appropriate to one of the three options available: Electrical, Civil, and Mechanical.

California State University - Los Angeles

(CSULA) Offer 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 102, 103, 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 248A	Masterpieces of World Literature	3
ENGL 248B	Masterpieces of World Literature	3
ENGL 230A	Introduction to American Literature	3
ENGL 230B	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.)

California State University - Los Angeles

ENGL 246A	Survey of English Literature	3
ENGL 246B	Survey of English Literature	3
ENGL 240	Creative Writing	3
ENGL 233	Readings in the Novel	3
ENGL 234	Readings in Short Fiction	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 one (1) year of Intermediate College Level Foreign Language. Select from the following:

FRENCH, GERMAN, JAPANESE or SPANISH
or Course two 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, ENGL102 or ENGL103.(2) 12 additional units in English selected from ENGL 221A, 221B, 222, 225, 226, 227, 228, 230A, 230B, 232, 233, 234, 235, 246A, 246B, 248A, 248B, and (3) the Associate in Arts Degree general education requirements.

CAREER OPPORTUNITIES: English graduates are employed in 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.

FORESTRY—670
TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION		UNITS
BIOL 200-201	Principles of Biology	5-5
MATH 112	Mathematical Statistics	3
CIS 178	Digital Computer Prog.	3

LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University Humboldt:

MATH 116	Calculus for Managerial, Biological and Social Sciences	4
CHEM 110	Elementary Chemistry	4
or CHEM 111	General Chemistry	(5)
ORNH 110	Soils	4

California State University Berkeley:

ECON 201	Principles	3
ECON 202	Principles	3
ENGL 102	Freshman Composition and Literature	3
GEOL 101	The Earth Environment	4
MATH 102	Analytic Geometry and Calculus I	4
CHEM 111-112	General Chemistry	5-5

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.

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

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY:		UNITS
FREN 101	Elementary French	5
FREN 102	Elementary French	5
FREN 201	Intermediate French	5
FREN 202	Intermediate French	4
FREN 281	Beginning Conversational French	3
FREN 282	Intermediate Conversational French	3

ADDITIONAL LOWER DIVISION REQUIREMENTS FOR SPECIFIC SCHOOLS

California State University Long Beach:

Two years of a second foreign language at the college level, or equivalent.

California State University Fullerton and L.A.:

FREN 281	Conversational French	3
FREN 282	Conversational French	3

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 minimum may be selected from categories 5. 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

		UNITS
GEOG 101	Physical Geography	3
GEOG 102	Cultural Geography	3
GEOG 105	World Regional Geography	3

ADDITIONAL LOWER DIVISION REQUIREMENTS FOR SPECIFIC SCHOOLS

California State University Los Angeles:

The Department of Geography and Urban Studies at CSULA offers undergraduate programs leading to Bachelor of Arts in Geography and also in Urban Studies.

Urban Studies Lower Division Requirements:

MATH 112	Math Statistics	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 A.A. degree general education requirements for a total of at least 60 units.

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

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

GEOLOGY—630
TRANSFER PROGRAM

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

		UNITS
CHEM 111	General Chemistry	5
CHEM 112	General Chemistry	5
GEOL 101	The Earth Environment	4
MATH 102	Analytic Geometry and Calculus I	4
MATH 103	Analytic Geometry and Calculus II	4

RECOMMENDED ELECTIVE

ESCI 180	Earth Science Materials and Preparations	1

ADDITIONAL LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Fullerton

B.A. in Earth Science.

BIOL 120	Introduction to Biological Science	4
CPSC 178	Digital Computer Programming	3
GEOL 201	Earth History	4
PHYS 201	Engineering Physics	4
PHYS 202	Engineering Physics	4
PHYS 203	Engineering Physics	4
or PHYS 101	General Physics	(4)
or PHYS 102	General Physics	(4)

California State University - Long Beach

For emphasis in General Geology*

PHYS 101	General Physics	4
PHYS 102	General Physics	4

*Consult Counselor for additional required courses for other emphases.

California State University - Los Angeles

GEOL 201	Earth History	4
PHYS 201	Engineering Physics	4
PHYS 202	Engineering Physics	4
PHYS 203	Engineering Physics	4

University of California - Los Angeles

BIOL 120	Introduction to Biological Science	4
ESCI 110	Introduction to Earth Science	4
PHYS 101	General Physics	4
PHYS 102	General Physics	4

RECOMMENDED: One (1), Introductory course in computer programming.

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.

GERMAN—552
TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY

		UNITS
GERM 101	Elementary German	5
GERM 102	Elementary German	5
GERM 201	Intermediate German	4
GERM 202	Intermediate German	4

ADDITIONAL LOWER DIVISION REQUIREMENTS FOR SPECIFIC SCHOOLS:

California State University Long Beach

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

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

(1) Meet the above requirements as listed for a state university, (2) complete the A.A. Degree general education requirements, and (3) take electives to achieve the minimum of 60 units.

CAREER OPPORTUNITIES: Employment with U.S. or international agencies or with international business firms, airline hostess, travel agency personnel, librarian, linguistic reporter, teacher, interpreter, translator.

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

HISTORY—740
TRANSFER PROGRAM

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

		UNITS
HIST 201	Political & Social History of the U.S.	3
HIST 202	Political & Social History of the U.S.	3
HIST 240	Western Civilization	3
HIST 241	Western Civilization	3

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 4.1	Western Civilization	3
or HIST 4.2	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:
- 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

California State University - Long Beach — **UNITS**

Child Development & Family Studies Option

A&P 120	Introduction to Human Anatomy and Physiology	4
or A&P 130	Human Anatomy and Physiology	(5)
PSYC 101	General Introductory Psychology	3
SOC 101	Introductory Sociology Principles	3
or ANTH 100	Cultural Anthropology	(3)

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

California State University - Los Angeles — **UNITS**

AUTO 100	Automotive Maintenance and Operation	4
DRAF 131	Fundamentals of Drafting Including AutoCAD	3
EL 110	Principles of DC Electronics	3
EL 110L	DC Electronics Laboratory	1

PHOT 100	Introductory Photography	3
PMT 100	Plastics Composites Manufacturing Technology	2
WMT 101	Introduction to Woodworking	2

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) electives as needed 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		**UNITS**
ARCH 111	Architectural Drafting	3
CHEM 111	General Chemistry	5
DRAF 131	Fundamentals of Drafting Including AutoCAD	3
ECON 201	Principles	3
MATH 102	Analytic Geometry and Calculus I	4
PHIL 106	Introduction to Logic	3
PHYS 101	General Physics	4
PHYS 102	General Physics	4

ADDITIONAL LOWER DIVISION REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Long Beach

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 135	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: Completion of the Bachelor's Degree Program qualifies a person to serve in expediting, coordination, inspection, specification and proposal writing, facilities planning and development, project management and associated work in the construction or manufacturing industries. Some graduates elect to obtain the General Contractors License and go directly into the construction business.

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		**UNITS**
CHEM 111	General Chemistry	5
DRAF 131	Fundamentals of Drafting Including AutoCAD	3
ECON 201	Principles	3
EL 110	Principles of DC Electronics	4
EL 110L	DC Electronics Laboratory	1
EL 114	Fundamentals of Digital Electronics	3
EL 114L	Fundamentals of Digital Electronics Lab	1
EL 120	Principles of AC Electronics	4
EL 120L	AC Electronics Laboratory	1
EL 200	Semi-Conductor Circuits	3
EL 200L	Semi-Conductor Circuits Laboratory	1
MATH 102	Analytic Geometry and Calculus I	4
PHIL 106	Introduction to Logic	3
PHYS 101	General Physics	4
PHYS 102	General Physics	4

ADDITIONAL LOWER DIVISION REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Long Beach

CIS 101	Introduction to Business Computer Information Systems	3
DRAF 237	Graphical Statics and Strength of Materials	3
EL 210	Electronic Systems Analysis	3
EL 210L	Systems Analysis Laboratory (For Computer Option)	1
MATH 112	Elementary Statistics	4

California State Polytechnic University - Pomona

ENGR 135	Statics	3

Other California State Universities that offer the Bachelor's Degree:

Chico, Fresno, San Jose, San Luis Obispo, and Sacramento.
Consult catalogs of specific institutions for requirements.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete 60 units to include, (1) 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 pur-

pose 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

		UNITS
CHEM 111	General Chemistry	5
DRAF 131	Fundamentals of Drafting Including AutoCAD	3
ECON 201	Principles	3
MATH 102	Analytic Geometry and Calculus I	4
PHIL 106	Introduction Logic	3
PHYS 101	General Physics	4
PHYS 102	General Physics	4

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, a student is qualified to work in careers such as production engineer, manufacturing engineer, tool engineer, program manager, cost estimator, and sales engineer. While there are many overlapping areas, the Industrial Technologist or Engineering Technologist is employed for the central purpose of supporting the practical side of engineering achievement with emphasis on the end product (production manager) rather than the conceptual process.

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

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 102	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
MET 120	Non-Destructive Testing	3
MTT 100	Machine Tool Introduction	2.5

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.

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

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
DIVISION REQUIREMENTS		
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
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 Global Resources 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 International Business and complete electives and general education requirements to achieve a minimum of 60 units.

INTERPRETING / 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 Interpreting/Translating 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 Asiatic History	3
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
CERTICATE 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
PHOT 100	Introduction to Photography	3
PHOT 110	Introduction to Digital Photography	3
Plus three units of the following:		
BA 100	Fundamentals of Business	3
or BUSA 100	Introduction to Accounting	3
Plus five units from the following:		
JOUR 105	Newspaper Production(can be repeated)	2*
JOUR 160L	Magazine Production(can be repeated)	1**
JOUR 298	Directed Studies (maximum 1 unit)	1
JOUR 299	Directed Studies(internship-maximum 2 units)	2
BA 110	Advertising	3

*may be repeated; a maximum of four units may be applied
**may be repeated; a maximum of two units may be applied

PUBLIC RELATIONS—147
CERTIFICATE OF ACHIEVEMENT

JOURNALISM MAJOR DEPARTMENT CORE REQUIREMENTS		**19**
JOURNALISM MAJOR DEPARTMENT REQUIREMENTS		**10**
PUBLIC RELATIONS CERTIFICATE REQUIREMENTS		**9**
BA 100	Fundamentals of Business	3
BA 109	Marketing	3
or BA 110	Advertising	(3)
JOUR 299	Directed Studies	2
CERTIFICATE ELECTIVE (1 UNIT MINIMUM)		
PHOT 110	Digital Imaging	3
or ART 192	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
SPCH 160	Parliamentary Procedure	1
TOTAL CERTIFICATE UNITS:		38

See Cerritos College Graduation Requirements.

CAREER OPPORTUNITIES: The A.A. Degree, the Certificate in Public Relations, and the Certificate in Journalism by themselves, or with other education and degrees as appropriate, may directly or indirectly enhance employment potential in a broad job spectrum where media communications and related analytical skills are desirable. These include writer/reporter/editor for both print and broadcast/electronic journalism media (newspaper, magazine, radio, TV, etc.), corporate communications and public relations, public information and publicity, business and industrial journalism, newsletter writer and publisher, freelance writer, photographer, advertising copywriter and salesperson, journalism teacher and student publications adviser, non- fiction book and article writer, editorial and publications services consultant, and myriad other publishing and related areas.

JOURNALISM—145
TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY		**UNITS**
JOUR 100	Introduction to Mass Communications	3
JOUR 101	Beginning News Writing and Reporting	3

ADDITIONAL LOWER DIVISION REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Fullerton
Journalism Concentration, Communications Major

JOUR 201	Advanced Reporting and Editing	3
PHOT 100	Introductory Photography	3

Broadcast Journalism Concentration, Communications Major

TH 258	Broadcast Writing/Pre-Production	3

Other Communication major concentrations are: Advertising; Photo-Communications; Public Relations; Television and Film.

California State University - Long Beach
Broadcast Journalism Concentration, Journalism Major

SPCH 271	Voice and Articulation	3

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.
See State University General Education List.

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		**UNITS**
AJ 102	Concepts of Criminal Law	3
AJ 202	Substantive Law	3
AJ 103	Criminal Procedures	3
B. Business Administration		
BA 111	Business Law	3
BA 112	Business Law	3
BL 101	Introduction to Law	3
C. Economics		
ECON 201	Principles	3
ECON 202	Principles	3
D. History		
HIST 201	Political & Social History of the U.S.	3
HIST 202	Political & Social History of the U.S.	3
or HIST 240	Western Civilization	3
HIST 241	Western Civilization	3
E. Philosophy		
PHIL 106	Introduction to Logic	3
PHIL 102	Introduction to Ethics	3
F. Political Science		
POL 202	Comparative Government	3
POL 210	International Relations	3

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

REQUIRED COURSES		**UNITS**
MMP 50	Fundamentals of Machine Moldmaking	3
MMP 51	Injection and Extrusion Molds	3
MMP 52	Compression, Transfer & Vacuum Forming Molds	3
MTT 100	Modern Manufacturing Concepts and Techniques	2.5
MTT 170	Computer Numerical Control Programming	4
WELD 100	Fundamentals of Welding	2
*DRAF 131	Fundamentals of Drafting	2
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 Degree 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		**UNITS**
MTT 1L	Numerical Control Specialty	3
MTT 50	Machine Shop Mathematics	3
MTT 51	CAD/CAM Introduction	2.5
MTT 52	Setup & Operation of CNC Machinery	2.5
MTT 54	Blueprint Reading	2.5
MTT 56	Shop Inspection	2.5
MTT 60	Advanced Machine Tool Concepts	2.5
MTT 62	Fixture Tooling	2.5
MTT 76	CAD/CAM Virtual Gibbs	2.5
MTT 80	CAD/CAM Mold Machining	2.5
MTT 100	Machine Tool Introduction	2.5
MTT 154	Shop Floor Communications and Post Processing	4
MTT 170	Computer Numerical Control Programming	2.5
MTT 172	Parts Programming	2.5
MTT 278	CAD/CAM Advanced	2.5
DRAFTING		
DRAF 131	Fundamentals of Drafting	2
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) MET 100A, PMT 65, DRAF 138, TM 50 (3) the A.A. Degree requirements, and (4) electives as needed.

RECOMMENDED ELECTIVES: MFGT 100,MMT 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)

MFGT 60	Quality Assurance (QA)	1.5
MFGT 55	Quality Control (QC)	1.5
MFGT 57	TOTAL Quality Management (TQM)	1.5
		4.5

Quality Control (QC)

MFGT 55	Quality Control (QC)	1.5
MFGT 53	Statistical Process Control (SPC)	1.5
MET 120	Nondestructive Testing (NDT)	3.0
		6.0

Statistical Process Control (SPC)

MFGT 55	Quality Control (QC)	1.5
MFGT 53	Statistical Process Control (SPC)	1.5
TM 50	Technical Math	2.5
		5.5

Total Quality Management (TQM)

MFGT 57	TOTAL Quality Management (TQM)	1.5
MFGT 60	Quality Assurance (QA)	1.5
MFGT 59	Design of Experiments (DOE)	1.5
MFGT 58	Benchmarking	1.5
		6.0

ISO 9000

MFGT 60	Quality Assurance (QA)	1.5
MFGT 55	Quality Control (QC)	1.5
MFGT 56	ISO 9000	1.5
		4.5

Advanced Quality Systems (AQS)

MFGT 57	TOTAL Quality Management (TQM)	1.5
MFGT 53	Statistical Process Control (SPC)	1.5
MFGT 58	Benchmarking	1.5
MFGT 59	Design of Experiments (DOE)	1.5
		6.0

MATHEMATICS—620 TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY

		UNITS
MATH 101	Pre-Calculus Mathematics	4
MATH 102	Analytic Geometry and Calculus I	4
MATH 103	Analytic Geometry and Calculus II	4
MATH 220	Analytical Geometry and Calculus III	4
MATH 240	Calculus and Differential Equations	4

California State University - Dominguez Hills

CIS 177	Programming in Pascal	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-Orientated Programming in C++	(3)
ENGL 100	Freshman Composition	3
PHYS 201	Engineering Physics	4
PHYS 202	Engineering Physics	4

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 - Los Angeles

CIS 178	Programming in Fortran	3
PHYS 201	Engineering Physics	4
PHYS 202	Engineering Physics	4
PHYS 203	Engineering Physics	4

California State Polytechnic University - Pomona

CIS 180	Programming in C/C++	3
or CIS 280	Object-Orientated Programming in C++	(3)

Please see a counselor for "option" courses on this major.

University of California - Irvine

CHEM 111	General Chemistry	5
AND CHEM 112	General Chemistry	5
CIS 178	Programming in Fortran	3
or CIS 177	Programming in Pascal	(4)
or CIS 280	Object-Orientated Programming in C++	(3)
or PHYS 201	Engineering Physics	(4)
or PHYS 202	Engineering Physics	(4)

See a counselor for teaching specialization.

University of California - Los Angeles

CHEM 111	General Chemistry	5
CHEM 112	General Chemistry	5
CIS 280	Object-Orientated Programming in C++	3
PHYS 201	Engineering Physics	4
PHYS 202	Engineering Physics	4
or PHYS 203	Engineering Physics	(4)

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.

MEDICAL ASSISTANT
PATIENT CARE AREAS

VERIFICATION OF COMPLETION
MEDICAL ASSISTANT-FRONT OFFICE

		UNITS
MA 60	Introduction to Medical Assisting	2
MA 62	Medical Insurance and Liability	3
MA 161	Medical Terminology	3
CIS 102	Introduction to Microcomputers Using Microsoft Office	3
SPCH 45	Speech Communication for Careers	1
TOTAL Verification Requirements		12

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:

		UNITS
HO 54	Medical Laboratory Skills	1
HO 55	Phlebotomy Procedures	1
MA 161	Medical Terminology	3
SPCH 45	Speech Communication for Careers	1
		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:

		UNITS
HO 55	Phlebotomy Procedures	1
MA 161	Medical Terminology	3
SPCH 45	Speech Communication for Careers	1
		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:

		UNITS
HO 53	Electrocardiography	1
MA 161	Medical Terminology	3
SPCH 45	Speech Communication for Careers	1
		5

MEDICAL ASSISTANT—911

Length and Kind of Program

The medical assistant program may be completed in two semesters with the curriculum leading to a Certificate of Achievement in Medical Assisting. The program culminates in a clinical lab experience which may be completed through an internship or occupational work experience.

Academic Requirements

To obtain a Certificate of Achievement, the student must achieve a grade of "C" or better in required medical assisting and general education course work. (Twelve units of the program must have been taken within the last five (5) years.) MA 67 and MA 68 have prerequisite courses which must be completed with a grade of "C" or better.

Expenses

A. See the college catalog for enrollment fees.
B. The student may expect to spend approximately $400 for books and uniforms. Health screening and immunizations will be at the student's expense.

Health

Health clearance requirements 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 will 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.

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.

Internship and Occupational Work Experience

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 agency. 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 Rescuer Training. Standard First Aid training is available through the American Red Cross.

MEDICAL ASSISTANT—911
CERTIFICATE OF ACHIEVEMENT

		UNITS
MEDICAL ASSISTING		
MA 60	Introduction to Medical Assisting	2
MA 62	Medical Insurance and Liability	3
MA 64	Medical Office Assisting	3
MA 66	Medications and Specialties	3
MA 67	Medical Office Administration	3
*MA 68	Medical Assisting Internship Experience	4
*MA 73	Medical Assisting Occupational Work Experience	(3)
*MA 74	Medical Assisting Occupational Work Experience	(4)
MA 161	Medical Terminology	3

HEALTH OCCUPATIONS

HO 53	Electrocardiography	1
HO 54	Medical Laboratory Skills	1
HO 55	Phlebotomy Procedures	1
HO 151	Elements of Nutrition	3
or HO 152	Nutrition	(3)

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 67.

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		**UNITS**
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

MET 55	Laboratory Procedures	1.0
MET 100A	Metallurgy I	3.0
MET 100B	Metallurgy II	2.5
		6.5

Ferrous Metallurgy Specialty

MET 52L	Metallurgy Specialty Lab	0.5
MET 53	Ferrous Metallurgy	2.5
MET 100A	Metallurgy I	3.0
		6.0

Nonferrous Metallurgy Specialty

MET 54	Nonferrous Metallurgy	3.0
MET 56	Survey of Nonferrous Heat Treat	1.5
MET 100A	Metallurgy I	3.0
		7.5

Nondestructive Testing Specialty (NDT)

MET 52L	Metallurgy Specialty Lab	0.5
MET 100A	Metallurgy I	3.0
MET 120	Nondestructive Testing (NDT)	2.5
		6.0

Ferrous Heat Treat Specialty

MET 50L	Heat Treating of Ferrous Metals	1.5
MET 53	Ferrous Metallurgy	2.5
MET 100A	Metallurgy I	3.0
		7.0

Nonferrous Heat Treat Specialty

MET 52L	Metallurgy Specialty Lab	0.5
MET 56	Survey of Nonferrous Heat Treat	1.5
MET 100A	Metallurgy I	3.0
		5.0

Laboratory Specialty

MET 52L	Metallurgy Specialty Lab	0.5
MET 55	Laboratory Procedures	1.0
MET 100A	Metallurgy I	3.0
		4.5

Welding Metallurgy Specialty

MET 51	Welding Metallurgy	2.0
MET 52L	Metallurgy Specialty Lab	0.5
MET 100A	Metallurgy I	3.0
		5.5

Quality Specialty

MET 52L	Metallurgy Specialty Lab	0.5
MFGT 53	Statistical Process Control (SPC)	1.5
MFGT 60	Quality Assurance (QA)	1.5
MET 100A	Metallurgy I	3.0
		6.5

MICROBIOLOGY—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
PHYS 101	General Physics	4
PHYS 102	General Physics	4

LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Long Beach

MATH 102	Analytic Geometry and Calculus I	4
or MATH 116	Calculus for Managerial, Biological and Social Sciences	(4)
MATH 103	Analytic Geometry and Calculus II	4

California State University - Los Angeles

CHEM 205	Quantitative Analysis Chemistry	4
MATH 101	Pre-Calculus Mathematics	4
MATH 140	Trigonometry	3

California State Polytechnic University - Pomona

CHEM 205	Quantitative Analysis Chemistry	4

University of California - Los Angeles

CHEM 211	Organic Chemistry	5
CHEM 212	Organic Chemistry	5
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
PHYS 203	Engineering Physics	4

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete 60 units to include: (1) the above required courses, (2) electives as needed, and (3) the Associate in Arts Degree 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 - 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, 150, 151	Private Study/Recital I, II, III, IV	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	3
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.

RECOMMENDED ELECTIVES: Music 102, 104, 108, 110, 144, 145, 146, 135, 143, 118, 119, 142, 114, 115, 124, 125, 126, 129, 130, 131, 132, 133, 134, 138, 139, 140

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 History and Literature I	3
MUS 106, 107, 108, 110	Theory I, II, III, IV	5, 5, 5, 5
MUS 148, 149, 150, 151	Private Study/Recital I, II, III, IV	1, 1, 1, 1

VOICE STUDENTS

MUS 116, 117	Voice Class I, II	3-3
MUS 112, 113	Piano Class I, II	3-3

INSTRUMENTALISTS

MUS 112, 113	Piano Class I, II	3-3

Recommended: Music 144, 145, 146, 135, 143, 118, 119, 114, 115, 124, 125, 126, 129, 130, 131, 132, 133, 134, 138, 139, 140.

ADDITIONAL LOWER DIVISION REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

University of California - Irvine

Two (2) courses selected from:

ART 101	Appreciation and History	3
ART 102	Appreciation and History	3
ART 103	Modern and Contemporary Appreciation	3
ART 105	Women Artists	3
ART 106	Mexican Art	3
PE 181	Introduction to Dance Cultures of the World	2
PE 191	History of Dance	3
TH 102	History of Classical Theatre	3
TH 103	History of the Modern Theatre	3

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 REQUIRMENTS:

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	UNITS
CIS 70A-Networking Fundamentals	2.5
CIS 70B-Local Area Networks	2.5
CIS 70C-Wide Area Networks	2.5
CIS 70D-Networking Architectures	2.5
CIS 70E-Internetworking	2.5
CIS 70F-Networking Protocols	2.5
CIS 70H-Networking Analysis & Design	2.5
	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, EL124, 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, continuous learning and self-development. In fulfilling these roles, the ADN graduate utilizes critical thinking, demonstrates clinical competence, and is accountable for and committed to the value of caring.

Nursing graduates are employed in a health care delivery system that continues to grow and change. The ADN graduate is an entry-level practitioner and is competent to practice as a direct caregiver in a variety of structured settings in which service is provided to diverse client populations. ADN graduates may subsequently pursue bachelor's, master's and doctoral degrees in nursing in preparation for advanced levels of practice.

CONCEPT OF EDUCATION

Nursing faculty believe that 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. LVN applicants selecting the 30-unit option are required to complete the placement test process for advisement purposes but are not required to complete these courses.
3. Completion of or current enrollment in prerequisite courses with grades of "C" or higher. In-progress prerequisite course courses 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 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 in Arts degree in nursing (Associate Degree in Nursing - ADN). Some students may need to take additional courses to meet English, reading and mathematics requirements.

Each unit costs $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) 989-9393.

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 100, 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.

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 Degee 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, PSYCH 100, SOC 100, SPCH 100 or SPCH 120 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
NRSG 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 PSYCH 100 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 1	4.0
NRSG 213	*Survey of Pharmacology	0.5
NRSG 214	*Medical-Surgical Nursing 2	3
Semester 2		
NRSG 220	**Medical-Surgical Nursing 3	5.5
NRSG 222	**Maternal/Child Nursing	5.5
Semester 3		
NRSG 230	**Psychosocial and Community Nursing	5
NRSG 232	**Medical-Surgical Nursing 4	5
Semester 4		
NRSG 240	**Medical-Surgical Nursing 5	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 license 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), NRSG 25, NRSG 200 (formerly NRSG 20), NRSG 211, and NRSG 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
Semester I		
+NRSG 1.3 (207) **	Medical-Surgical Nursing III	5
+NRSG 1.4 (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 II		
+NRSG 2.2 (218) **	Psychosocial Community Nursing	3.5
+NRSG 2.1 (219) **	Medical-Surgical Nursing IV	5.5

+ last offered SP 2001

Semester III		
+NRSG 2.3 (270) **	Medical-Surgical Nursing 5	5
+NRSG 2.4 (280)2	*Professional Role Transition	3

+ last offered FA 2001

*6-week courses **9-week courses

NEW CURRICULUM

PREREQUISITES:

A&P 130, MICR 200, HO 152, HO 236 & 237, PSYCH 100, NRSG 25, NRSG 200, NRSG 211, and NRSG 251 or equivalents 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
Semester 1		
NRSG 220	**Medical-Surgical Nursing 3	5.5
NRSG 222	**Maternal/Child Nursing	5.5
Semester 2		
NRSG 230	**Psychosocial and Community Nursing	5
NRSG 232	**Medical-Surgical Nursing 4	5
Semester 3		
NRSG 240	**Medical-Surgical Nursing 5	5
NRSG 242	*Professional Role Transition	3

*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 NRSG 105 (formerly NRSG 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. Completion of a medication calculation examination with a score of 75% or higher.

REQUIRED COURSES		UNITS
Semester I		
+NRSG 2.2 (218)	**Psychosocial Community Nursing	3.5
+NRSG 2.1 (219)	**Medical-Surgical Nursing IV	5.5
HO 236	Life Span/Health Issues 1	1
HO 237	Life Span/Health Issues 2	1
+ 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, NRSG 26, NRSG 215, HO 236, HO 237, and NRSG 251, and PSYCH 100 or equivalent with grades of Credit or "C" or higher. Successful completion of READ 54, MATH 60 and ENGL 52 or equivalent with grades of Credit or "C" or higher or the college placement test process. Valid California LVN license. Completion of a medication calculation examination with a score of 75% or higher.

REQUIRED COURSES		UNITS
Semester 1		
NRSG 230	**Psychosocial and Community Nursing	5
NRSG 232	**Medical-Surgical Nursing 4	5
Semester 2		
NRSG 24O	**Medical-Surgical Nursing 5	5
NRSG 242	*Professional Role Transition	3

*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 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		UNITS
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 27, or equivalent with grades of "C" or higher. Completion of the college 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:		UNITS
Semester 1		
NRSG 230	**Psychosocial and Community Nursing	5
NRSG 232	**Medical-Surgical Nursing 4	5
Semester 2		
NRSG 240	**Medical-Surgical Nursing 5	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, 236, and 237, NRSG 27, 200, 215, and 251, and PSYCH 100, 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 successfully completed academic courses and/or have relevant knowledge and/or skills acquired in other than an accredited institution will be given advanced standing in the nursing program upon verification of such knowledge and/or skills.

TRANSFER CREDIT

A. Credit will be granted for related previous education completed in:
   1. Accredited Vocational or Practical Nursing courses
   2. Accredited Registered Nursing courses
   3. Accredited Psychiatric Technician courses
   4. 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 evaluation.

C. Objectives for both the written and/or practical examinations are made available to the student prior to evaluation.

D. Student must meet the requirements which govern credit by examination as stated in the college catalog.

E. A minimum of twelve (12) units of the nursing curriculum must be in residency at Cerritos College in order to receive the Associate Degree in Nursing.

OPTION F—BOARD OF REGISTERED NURSING REFERRAL

Applicants for California licensure as registered nurses may be referred by the Board of Registered Nursing to complete specific areas of nursing content prior to taking the NCLEX-RN examination. The Nursing Program offers such applicants the opportunity to complete nursing preparation as specified by the Board of Registered Nursing.

PREREQUISITES: A valid letter of referral from the California Board of Registered Nursing for completion of a specified area. NRSG 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.

Current licensure as a registered nurse in California.

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		**UNITS**
A&P 200	Human Anatomy	5
A&P 201	Human Physiology	5
CHEM 100	Introductory Chemistry	4
MICR 200	Principles & Applications of Microbiology	5
PSYC 101	General Introductory Psychology	3
SOC 101	Introductory Sociology Principles	3

(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

A&P 200	Human Anatomy	5
A&P 201	Human Physiology	5
MICR 200	Introduction to Microbiology and Bacteriology	5
PSYC 101	General Introductory Psychology	3
SOC 101	Introductory Sociology Principles	3

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.

A&P 200	Human Anatomy	5
A&P 201	Human Physiology	5
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
ENGL 100	Freshman Composition	3

ENGL 102	Freshman Composition and Literature	3
MICR 200	Principles and Applications of Microbiology	5
PHYS 100	Elementary Physics	4
PSYC 101	General Introductory Psychology	3
SOC 101	Introductory Sociology Principles	3

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

DEPARTMENT REQUIREMENTS		UNITS
ORNH 100	Introduction to Ornamental Horticulture	3
ORNH 110	Soils	4
ORNH 120	Ornamental Trees	4
ORNH 130	Ornamental Shrubs	4
ORNH 150	Turf Grass Management and Ground Covers	4
ORNH 160	Insects and Weeds	4
ORNH 180	Basic Landscape Design	4
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

		UNITS
ARCH 110	Architectural Drawing	3
ARCH 122	Architectural Delineation	2
ORNH 50	Basic Landscape Irrigation	1.5
ORNH 100	Intro to Ornamental Horticulture	3
ORNH 110	Soils	4
ORNH 120	Ornamental Trees	4
ORNH 130	Turfgrass Management and Ground Covers	4
ORNH 180	Landscape Design	4
TOTAL CERTIFICATE REQUIREMENTS		25.5

RECOMMENDED ELECTIVES: BA 53, BUSA 100.

ORNAMENTAL HORTICULTURE LANDSCAPE MANAGEMENT—688 CERTIFICATE OF ACHIEVEMENT

DEPARTMENTAL REQUIREMENTS (28 Units)		UNITS
ORNH 50	Basic Landscape Irrigation	1.5
ORNH 51	Advanced Landscape Irrigation	1.5
ORNH 52	Residential Landscape Design	1.5
ORNH 53	Commercial Landscape Design	1.5
ORNH 54	Landscape Contracting Management	1.5
ORNH 55	Landscape Contracting Operations	1.5
ORNH 100	Introduction to Ornamental Horticulture	3
ORNH 110	Soils	4
ORNH 120	Ornamental Trees	4
ORNH 130	Ornamental Shrubs	4
ORNH 150	TurfGrass Management and Ground Covers	4
TOTAL UNITS REQUIRED:		28

RECOMMENDED ELECTIVES: DRAF 131, ER 16.

ORNAMENTAL HORTICULTURE FLORAL DESIGN—689 CERTIFICATE OF ACHIEVEMENT

DEPARTMENTAL REQUIREMENTS (25 Units)		UNITS
ORNH 58	Interior Plantscapes	2
ORNH 59	Basic Floral Design	2
ORNH 60	Advanced Floral Design	2
ORNH 61A	Special Occasions Floral Design I	2
ORNH 61B	Special Occasions Floral Design II	2
ORNH 62B	Wedding Floral Design I	2
ORNH 62C	Wedding Floral Design II	2
ORNH 63	Integrated Floral Design	1
ORNH 64	Floral Design for Funerals	1
ORNH 100	Introduction to Ornamental Horticulture	3
BUSA 100	Introduction to Accounting	3
BA 53	Small Business Management	3
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
PHAR 40L	Pharmacy Clerk Lab	1
PHAR 45	Retail Products for Pharmacy Clerks	2
PHAR 47	Pharmacy Clerk Clinical Experience	2
PHAR 60	Introduction to Pharmacy	1
PHAR 61	Pharmacy Skills Development	1
MATH 20	Basic Mathematics	3
*BASS 62	Microcomputer Keyboarding	1
OR *BASS 135	Typewriting Speed/Control Building	1
TOTAL UNITS REQUIRED:		11

*Students who provide documented ability to type 35 wpm or more may choose to waive the keyboarding requirement.

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.

WRITING PROFICIENCY REQUIREMENT:

Completion of ENGL 52 with a grade of Credit or "C" or higher, or completion of ENGL 1.

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.

READING PROFICIENCY REQUIREMENTS

(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.
   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 (562) 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 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.
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

REQUIRED COURSES		UNITS
HO 56	Medication Calculations	1
PHAR 50	Pharmaceutics	1.5
PHAR 60	Introduction to Pharmacy	1
PHAR 61	Pharmacy Skills Development	1
PHAR 62	Pharmacy Operations I	.5
PHAR 63	Pharmacy Operations II	2
PHAR 64	Pharmacy Operations III	2
PHAR 81	Over-The-Counter Products	3
PHAR 83	Pharmacy Technician Pharmacology I	3
PHAR 85	Pharmacy Technician Pharmacology II	3
PHAR 90	Clinical Experience I	3
PHAR 95	Clinical Experience II	5
MA 161	Medical Terminology	3
PHAR 73/74	Pharmacy Technician Occupational Work Experience (Optional)	3-4
BASS 62	Microcomputer Keyboarding	1
BASS 135	Typewriting Speed/Control Building	1
TOTAL CERTIFICATE REQUIREMENTS:		31.0

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		UNITS
California State University - Dominguez Hills		
PHIL 100	Introduction to Philosophy	3
California State University - Fullerton		
PHIL 100	Introduction to Philosophy	3
PHIL 106	Introduction to Logic	3
California State University - Long Beach		
PHIL 100	Introduction to Philosophy	3
or PHIL 102	Introduction to Ethics	(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 201 & 202	Intermediate French	(5,4)
GERM 201 & 202	Intermediate German	(4,4)
JAPN 201 & 202	Intermediate Japanese	(5,4)
SPAN 201 & 202	Intermediate Spanish	(5,4)
University of California - Los Angeles		
PHIL 102	Introduction to Ethics	3
PHIL 202	Critical Thinking and Argumentative Writing	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
ASSOCIATE IN ARTS DEGREE PROGRAM

MAJOR REQUIREMENTS (26 UNITS)		UNITS+QL
DEPARTMENT REQUIREMENTS (18 UNITS)+QL		
PHOT 100	Introductory Photography	3
PHOT 102	Intermediate Photography	3
PHOT 120	Introduction to Color Slide Photography	3
PHOT 200	Advanced Photography	3
PHOT 234	Portfolio Development	3
PHOT 240	Experimental Photography	3
SELECT 5 UNITS MINIMUM COURSE WORK FROM THE FOLLOWING:		
PHOT 124	Intermediate Color Photography	2
PHOT 220	Advanced Color Photography	3
PHOT 230	Portraiture	3
PHOT 242	Non-Silver Photography	3
PHOT 250	Contemporary Photographic Expression	3
PHOT 298	Directed Studies	1
OR PHOT 299	Directed Studies	2
JOUR 130	Photo Journalism	3
SELECT 3 UNITS MINIMUM COURSE WORK FROM THE FOLLOWING:		
ART 120	Two-Dimensional Design	3
ART 184	Graphic Design I	3
JOUR 105	Newspaper Production	2
JOUR 160	College Magazine Production	1
BA 54	Retail Display	3
BA 121	Sales	3
TH 123	Stage Make-Up	2
TH 156	Video Production	3

NOTE: 35 mm camera and film are provided by each student. Laboratory fees are also required. Refer to the class schedules for specific course fees.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

A minimum of 60 units to include: (1) the above course requirements, (2) the Associate in Arts degree general education requirements, and (3) electives as needed.

CAREER OPPORTUNITIES: Photographer for newspapers, magazines; commercial, industrial, television advertising; scientific research; portrait studio; custom photo lab technician; medical photographic technician.

See Cerritos College Graduation Requirements.

PHOTOGRAPHY—155
TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY		UNITS
PHOT 100	Introduction to Photography	3

Neither the California State University nor the University of California offer a degree in Photography. Various photography options however are available at some California State University campuses.

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
MEN—410
WOMEN—405
TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY		UNITS
HED 110	Safety Education and First Aid	2
PE 100	Introduction to Physical Education	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 - Fullerton
KINESEOLOGY 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 156C	Golf: Advance Stroke Development and Course Play	2
PE 156B	Golf: Intermediate/Advanced	2

Additional options: Athletic Training Program, Health Science Bachelors of Science. See Cerritos College Physical Education Counselor for further information.

California State University - Long Beach
KINESEOLOGY MAJOR

A&P 200	Human Anatomy	5
A&P 201	Human Physiology	5
PE 141	Fitness and Wellness	3
PE 156A	Golf: Beginning	1
PE 156B	Golf: Intermediate/Advance	2
PE 159A	Tennis, Beginning	1
PE 172A	Volleyball, Beginning	1
PE 172B	Volleyball, Intermediate/Advanced	2
PE 179A	Soccer, Beginning	1
PE 179B	Soccer, Intermediate/Advanced	2
PSYC 101	General Introductory Psychology	3

Options available: Athletic Training, Fitness, Adapted Physical Education, Elementary School Physical Education, and Secondary School Physical Education, and Bachelor of Science in Kinesiology.

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.

SELECTION PROCEDURES

1. Academic Evaluation
   a. All required documents, including progress reports, transcripts, and work verification from Physical Therapist employer must be in the Health Occupations Division Office by April 15.
   b. No student whose college grade point average is below 2.0, or who has not cleared English, Math, or Reading deficiencies can be considered. These are considered minimum standards of academic preparation.
   c. Additional consideration will be given for work experience in the field of physical therapy or related areas, and for students who have completed additional medical or science related classes.

EXPENSES

Students are expected to purchase a student body card. Enrollment fees, project fees, uniforms, books, and supplies which will cost approximately $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 a "C" 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 appointment with a counselor, call (562) 860-2451, Ext. 2231.
5. As soon as all of the above material is received and reviewed, you will be notified of acceptance or non-acceptance after May 1. However, if you are completing admission requirements during the spring session, a "work-in-progress" report must be submitted to the Health Occupations Division at the end of the first four weeks of the course.
6. If you are accepted into the Physical Therapist Assistant Program, you must present a valid CPR card for Basic Life Support Course Level "C", offered through the Heart Association or the American Red Cross prior to the first hospital experience (PTA 25). 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 filed in order to apply. Also, strong preparation in Biology, Chemistry, Physics, Anatomy and Physiology is recommended.

California State University - Northridge		**UNITS**
BIOL 120	Introduction to Biological Science	4
CHEM 111	General Chemistry	5
CHEM 112	General Chemistry	5
MATH 101	Pre-Calculus Mathematics	4
PHYS 101	General Physics	4
PHYS 102	General Physics	4
SOC 101	Introductory Sociology Principles	3

A "C" or better is required in all classes with a 2.75 overall G.P.A.

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
CIS 170	Programming in Basic	3
or CIS 177	Programming in Pascal	(4)
MATH 102	Analytic Geometry and Calculus I	4
MATH 103	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 102	Analytic Geometry and Calculus I	4
MATH 103	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 102	Analytic Geometry and Calculus I	4
MATH 103	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 102	Analytic Geometry and Calculus I	4
MATH 103	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 102	Analytic Geometry and Calculus I	4
MATH 103	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 178	Programming in Fortran	3
MATH 102	Analytic Geometry and Calculus I	4
MATH 103	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 102	Analytic Geometry and Calculus I	4
MATH 103	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 above 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
		5.5

Inspection and Testing Specialty

PMT 63L	Specialty Plastics Lab	.5
PMT 100	Plastics I	2.5
MET 120	Nondestructive Testing	3
		6

Injection Molding Specialty

PMT 59	Injection Molding I	2.5
PMT 63L	Specialty Plastics Lab	.5
PMT 100	Plastics I	2.5
		5.5

Moldmaking Specialty

PMT 59	Injection Molding I	2.5
PMT 63L	Specialty Plastics Lab	.5
PMT 65	Moldmaking	3
		6

Fiberglass Specialty

PMT 61	Fiberglass I	2.5
PMT 63L	Specialty Plastics Lab	.5
PMT 67	Fiberglass II	2.5
		5.5

Composites Specialty

PMT 61	Fiberglass I	2.5
PMT 67	Fiberglass II	2.5
PMT 70	Composites Technology	2.5
		7.5

Fiberglass / Composite Repair Specialty

PMT 53-Composite Repair		3
PMT 61	Fiberglass I	2.5
PMT 67	Fiberglass II	2.5
		8

Tooling Specialty

PMT 63L	Specialty Plastics Lab	.5
PMT 72	Tooling for Plastics	2.5
PMT 221	Modelmaking	2.5
		5.5

PLASTICS / COMPOSITES MANUFACTURING TECHNOLOGY—871 CERTIFICATE OF ACHIEVEMENT PROGRAM

CORE		UNITS
PMT 100	Plastics I	2.5
TM 50	Technical Mathematics	3
BCOM 147	Business Communications	3
BCOM 148	Effective Business Presentations	3

COMPOSITES MANUFACTURING OPTION—872

PMT 61	Fiberglass I	2.5
PMT 63L	Specialty Plastics Lab	.5
PMT 67	Fiberglass II	2.5
PMT 68	Plastics Materials and Processes	2.5
PMT 70	Composites Technology	2.5
DRAF 16	Blueprint Reading for Machine Trades	2
TOTAL UNITS (INCLUDING CORE):		24

COMPOSITE INSPECTION OPTION—873

PMT 61	Fiberglass I	2.5
PMT 63L	Specialty Plastics Lab	.5
PMT 67	Fiberglass II	2.5
PMT 70	Composites Technology	2.5
MET 68	Plastics Materials and Processes	2.5
MET 120	Nondestructive Testing	3
TOTAL UNITS (INCLUDING CORE):		25

PLASTIC / COMPOSITE TOOL DESIGN OPTION—874

PMT 65	Moldmaking I	3
PMT 72	Tooling for Plastics	2.5
DRAF 138	Fundamentals of Computer Aided Drafting	4
DRAF 258	Design and Production Technology with AutoCad	4
ENGR 123	Descriptive Geometry	3
TOTAL UNITS (INCLUDING CORE):		28

PLASTICS MANUFACTURING OPTION—875

PMT 4	Plastics III	2.5
PMT 59	Injection Molding I	2.5
PMT 60	Extrusion	3
PMT 61	Fiberglass I	2.5
PMT 63L	Specialty Plastics Lab	.5
PMT 64	Plastics II	2.5
PMT 66	Hydraulics and Pneumatics	3
PMT 68	Plastics Materials and Processes	2.5
PMT 71	Plastics IV	2.5
PMT 72	Tooling for Plastics	2.5
TOTAL UNITS (INCLUDING CORE):		33

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete 60 units to include: (1) the above requirements for a specific Certificate of Achievement, (2) 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

		UNITS
POL 101	American Political Institutions	3
POL 220	Comparative Government	3

RECOMMENDED ELECTIVES IN PREPARATION FOR UPPER DIVISION WORK: ANTH 100, ECON 201 & 202, GEOG 102, HIST 201& 202, POL 210, PSYC 101, SOC 101.

University of California - Los Angeles

POL 201	Introduction to Political Science and American Government	3
or POL 101	American Political Institutions	(3)
POL 220	Comparative Government	3
POL 210	International Relations	3

University of California - Irvine

CIS 101	Introduction to Business Computer Information Systems	3
or CIS 103	Computer Programming Logic	(3)

or CIS 280	Object-Oriented Programming in C++	(3)
MATH 102	Analytic Geometry and Calculus I	4
MATH 103	Analytic Geometry and Calculus II	4

TWO COURSES FROM:

POL 201	Introduction to Political Science and American Government	3
POL 220	Comparative Government	3
POL 101	American Political Institutions	3
POL 210	International Relations	3
POL 230	Contemporary Political Issues: Middle East	3

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-CHIROPRACTIC—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 at least 75 semester units of 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 2.25 on a 4.0 scale.

MINIMUM COURSE REQUIREMENTS FOR ALL CHIROPRACTIC SCHOOLS MUST INCLUDE THE FOLLOWING:		UNITS
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
ENGL 102	Freshman Composition & Literature	3
or 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:

Los Angeles College of Chiropractic

Recommended:

A&P 200	Human Anatomy	5
or A&P 201	Human Physiology	(5)
Additional Social Sciences and Humanities courses		15

Cleveland Chiropractic College of Los Angeles

Social Sciences and Humanities courses 15

Any two (2) of the following:

A&P 130, A&P 200, A&P 201, BIOL 200, BIOL 201, MICR 200, ZOOL 120.

For accurate programming and more detailed information concerning the above requirements and requirements for the Bachelor of Science Degree at the Chiropractic College consult the Cerritos College Pre-Chiropractic counselor.

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-DENTAL—651 TRANSFER PROGRAM

Admission to most schools of Dentistry is based primarily on the candidates' Academic achievement in a college program and performance in the Dental Admissions Test (DAT). Because most of the applicants being admitted to Dental schools possess a Bachelor's degree, students are advised to integrate the dental school requirements into a program that will lead to a Bachelor's Degree in a major of their choice.

MINIMUM COURSE REQUIREMENTS FOR MOST DENTAL SCHOOLS		UNITS
BIOL 120	Introduction to Biological Science	4
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
ENGL 100	Freshman Composition	3
ENGL 102	Freshman Composition and Literature	3
PHYS 101	General Physics	4
PHYS 102	General Physics	4

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.

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 under-graduate college work, the majority of entering medical students has obtained the Bachelor's degree. Medical schools do not required 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.

COURSE REQUIREMENTS FOR MOST MEDICAL SCHOOLS		UNITS
BIOL 120	Introduction to Biological Science	4
BIOL 200	Principles of Biology	5
BIOL 201	Principles of Biology	5
CHEM 111	General Chemistry	5
CHEM 112	General Chemistry	5
CHEM 205	Quantitative Analysis	4
CHEM 211	Organic Chemistry	5
CHEM 212	Organic Chemistry	5
ENGL 100	Freshman Composition	3
ENGL 102	Freshman Composition & Literature	3
PHYS 101	General Physics	4
PHYS 102	General Physics	4

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, 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's degree requirement at the transfer school.

For information about specific medical school requirements are encourage to consult "Admissions Requirements of American Medical Colleges," a catalog published yearly by the Association of American Medical Colleges, Attn: Membership and Subscriptions, One Dupont Circle, N.W., Washington, D.C. 20036. Price $5.00

For accurate programming and more detailed information concerning the above requirements as well as the programs of other schools of medicine, consult the Cerritos College Pre-medical counselor.

CAREER OPPORTUNITIES: General Practice, Group Practice, Military, Government Service, Foundation Medicine, Specialties: Internal Medicine; Pediatrics, Dermatology, Surgery, Obstetrics/Gynecology, Ophthalmology, Urology, Anesthesiology, Neurology, Psychiatry, Pathology, Radiology, Otolaryngology.

PRE-OPTOMETRY—648 TRANSFER PROGRAM

The following curriculum has been prepared to meet the requirements for admission to the Southern California College of Optometry. In general, Admission to schools of optometry offering the Doctor of Optometry requires the completion of a minimum of 90 semester units of professional course work as detailed below. No more than 70 units earned at a two-year college may apply to this minimum. Because admission has become increasingly competitive many students will have completed the equivalent of a Bachelor's Degree in a major of their choice.

PRE-OPTOMETRY COURSE REQUIREMENTS		UNITS
BIOL 200	Principles of Biology	5
CHEM 111	General Chemistry	5
CHEM 112	General Chemistry	5
CHEM 211	Organic Chemistry	5
ENGL 100	Freshman Composition	3
ENGL 102	Freshman Composition & Literature	3
MATH 102	Analytic Geometry and Calculus I	4
MATH 112	Mathematical Statistics	3
MICR 200	Principles & Applications of Microbiology	5
PHYS 101	General Physics	4
PHYS 102	General Physics	4
*PSYC 101	General Introductory Psychology	3
ZOOL 120	Introduction to Animal Science	4

*Plus additional three (3) units of Psychology other than a statistical course.

Students desiring a Bachelor of Science degree from the Southern California College of Optometry must complete additional general education requirements in the areas of Fine Arts, Humanities, and Social Science.

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		UNITS
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
ENGL 100	Freshman Composition	3
ENGL 102	Freshman Composition & Literature	3
MATH 102	Analytic Geometry and Calculus I	4

ADDITIONAL DOCTORATE REQUIREMENTS FOR SPECIFIC SCHOOLS OF PHARMACY

University of Southern California

ECON 202	Principles	3

HUMANITIES	Two (2) courses	3-3
PSYC 101	General Introductory Psychology	3
SOCIAL / BEHAVIORAL		
SCIENCE	Two (2) additional courses	3-3
SPCH 100	Fundamentals of Oral Communication	3

University of California - San Francisco

CHEM 205	Quantitative Analysis	4
MATH 103	Analytic Geometry and Calculus II	4
PHYS 101	General Physics	4
PHYS 102	General Physics	4

Plus, Humanities, Social and Behavioral Science five (5) courses.

University of Pacific

ECON 202	Principles	3
PHYS 100	Elementary Physics	4
or one (1) year of high school physics (with Lab)		
PSYC 101	General Introductory Psychology	3
SPCH 130	Fundamentals of Speaking	3
Plus, other General Education requirements		(9)

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 72 semester units of college work including the required courses listed below before they apply to the School of Veterinary Medicine. Because enrollment is limited, however, most successful applicants have completed four or more years of college, a grade-point-average of B+, a strong science background, a good deal of experience with animals, and exceptional motivation toward a career in veterinary medicine.

PRE-VETERINARY COURSE REQUIREMENTS		UNITS
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
ENGL 100	Freshman Composition	3
ENGL 102	Freshman Composition & Literature	3
MATH 112	Statistics	3
PHYS 101	General Physics	4
PHYS 102	General Physics	4
ZOOL 120	Introduction to Animal Science	4

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

		UNITS
PSYC 101	General Introductory Psychology	3
PSYC 210	Elementary Statistics	4
or MATH 112	Elementary Statistics	4
PSYC 220	Research Methods	4

Recommended Electives: SOC 101, ANTH 100, and PHIL 202

ADDITIONAL LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Fullerton

A maximum of nine (9) lower division units of psychology courses may be applied toward psychology major requirements. If PSYC 210 is used for the major, another transferable mathematics course must be taken to satisfy general education requirements. MATH 112, therefore is suggested completing.

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	Human Evolution and Variation	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	(5)
or CHEM 100	Introductory Chemistry	(4)
or CHEM 110	Elementary Chemistry	(4)
or CHEM 111	General Chemistry	(5)
MATH 102	Analytic Geometry and Calculus I	4
or MATH 115	Finite Mathematics	(4)
or CIS 280	Object-Oriented Programming in C++	(3)
or PHIL 100	Introduction to Philosophy	(3)
or PHIL 102	Introduction to Ethics	(3)
or PHIL 106	Introduction to Logic	(3)
or PHIL 202	Critical Thinking and Argumentative Writing	(3)
PHYS 100	Elementary Physics	4
or PHYS 101	General Physics	(4)
or PHYS 201	Engineering Physics	(4)

University of California - Irvine

PSYC 150	Personal and Social Adjustment	3
or PSYC 251	Developmental Psychology	(3)
PSYC 241	Introduction to Psychobiology	3
PSYC 261	Social Psychology	3
or PSYC 271	Abnormal Psychology	(3)

Recommended: BIOL 120

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

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

California State University - Long Beach:

PSYC 101	General Introduction Psychology	3
SOC 1	Introduction Sociology Principles	3
JOUR 110	Principles of Public Relations	3
An appreciation course in Art, Music, or Theatre		3
A creative arts activity course (e.g. art, photo, industrial arts) or a performing arts activity course (e.g. dance, choir, drama)		3
PE Activity	3	

(CSULB will apply only 3 units of PE activity toward Recreation major requirements. Additional units of PE activity may apply as general electives toward the Bachelor's Degree.)

California State University - Los Angeles:

CSULA offers an interdisciplinary Bachelor of Science Degree program in RECREATION and LEISURE STUDIES. Consult with a Cerritos Recreation Counselor regarding lower division preparation.

California State University - Fullerton:

Consult with Cerritos Recreation Counselor or contact directly the CSUF Department of Health Education, Physical Education and Recreation.

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.

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, Anthropology, Human Services, Psychology, Sociology 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, Research Methods and Statistics. Contact a Cerritos College counselor for further information.

California State University - Long Beach: **UNITS**

CSU Long Beach has a Social Work major program.

A&P 120	Introduction to Human Anatomy & Physiology	4
ANTH 100	Cultural Anthropology	3
PSYC 101	General Introductory Psychology	3
PSYC 210	Elementary Statistics	4
or MATH 112	Elementary Statistics	(4)
PSYC 271*	Abnormal Psychology	3
SOC 101	Introductory Sociology Principles	3

*This class is strongly recommended.

Additional coursework that will be considered advantageous;
Any Ethnic Studies, Women Studies, Gerontology, Computer literacy, and Spanish classes.

California State University - Los Angeles

CSU Los Angeles has 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

SOCIOLOGY—760
TRANSFER PROGRAM

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

PSYC 210	Elementary Statistics	4
or MATH 112	Math Statistics	(4)
SOC 101	Introductory Sociology	3

LOWER DIVISION REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS
California State University - Long Beach

ANTH 100	Cultural Anthropology	3
SOC 201	Social Problems	3

Recommended Electives

ANTH 100	Cultural Anthropology	3
PSYC 101	General Introductory Psychology	3
SOC 215	Sociology of Cultural Diversity: Challenge and Change	3
SOC 120	Introduction to Human Sexuality	3
SOC 110	Marriage and the Family	3
SOC 210	American Minority Relations	3

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete the above common division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all AA degree general education requirements for a total of at least 60 units.

CAREER OPPORTUNITIES: 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

		UNITS
SPAN 101	Elementary Spanish	5
SPAN 102	Elementary Spanish	5
SPAN 201	Intermediate Spanish	5
SPAN 202	Intermediate Spanish	4

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

SPAN 213	Living Spanish Grammar and Written Communication	2
SPAN 214	Living Spanish Grammar and Written Communication	2
SPAN 281	Beginning Conversational Spanish	3
SPAN 282	Intermediate Conversational Spanish	3

University of California - Riverside

SPAN 213	Living Spanish Grammar and Written Communication	2
SPAN 214	Living Spanish Grammar and Written Communication	2
SPAN 281	Beginning Conversational Spanish	3
SPAN 282	Intermediate Conversational Spanish	3

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—540
TRANSFER PROGRAM

LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Long Beach

		UNITS
	COMMUNICATIONS EMPHASIS	
SPCH 120	Fundamentals of Interpersonal Communication	3
SPCH 130	Fundamentals of Speaking	3
SPCH 132	Fundamentals of Small Group Communication	3
SPCH 235	Fundamentals of Argumentation and Persuasion	3
SPCH 271	Voice and Articulation	3

California State University - Fullerton

SPCH 100	Fundamentals of Oral Communication	3
SPCH 130	Fundamentals of Speaking	3
SPCH 235	Argumentation and Persuasion	3
	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
(Pending Chancellor's Office Approval)

CERTIFICATE OF ACHIEVEMENT
SPEECH-LANGUAGE PATHOLOGY AIDE

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 100	Introduction to Speech and Language Pathology	3
SLP 110	Normal Communication, Disorders and 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

(Pending Chancellor's Office Approval)

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
		15
FIRST YEAR		
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
		15
SECOND YEAR		
First Semester		
SL 50	Beginning Sign Language	2
SPCH 229	Speech & Language Development in Children	3
SLP 230	Adaptive Communication Technology	1.5
SLP 235	Adult Disorders and Treatment	5
		11.5
SECOND YEAR		
Second Semester		
SL 51	Intermediate Sign Language	2
SLP 240	Childhood Field Experience	2.5
SLP 245	Adult Field Experience	2.5
		7.0
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 levelpre-school through classes for adults. In practice, most teachers with Single-Subject authorization teach in junior or senior high schools, grades 7-12.

A candidate lacking this major background may validate competency by passing an examination in a specified subject matter category. No minor is required.

MULTIPLE-SUBJECT INSTRUCTION CREDENTIAL
(Liberal Studies / Elementary School Teaching)

A teacher authorized for Multiple-Subject instruction may be assigned to teach in any self-contained 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. However, colleges and universities may use different names for programs approved as a waiver for the Multiple-Subject examination. Completion of a degree program which is approved by the Commission is referred to as a waiver degree 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. The courses are part of a curriculum that can be started at a community college and completed at the CSU. The entire curriculum is designed for individuals who seek the preprofessional subject matter preparation for elementary school teaching consistent with the standards 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 benefit from a broad interdisciplinary liberal arts education and do not wish to pursue elementary school teaching should see a Cerritos College counselor for advisement. Requirements may vary from those listed below.

An Associate In Arts Degree in liberal studies is not available at Cerritos College. Students may however, declare General Studies as their major.

California State Universit,y Dominguez Hills:
English 100
Speech 100, 120, 130, or 132
English 103, Philosophy 106, 202, or Speech 235
Biology 120
Earth Science 110 or Geology 101, 201, or 207
or Physics 101 or 102
Astronomy 101 and 101L, or Chemistry 100
Math 110A and 110B
English 222
Language other than English (at least 6 units of the same language)
Art 101, 102, 103, or 106
Music 100 or 105
History 101, 201, 202, 220, or 221
Political Science 101 or 201
Geography 105
History 240 or 241
Child Development 110 or Psychology 251
CIS 101
Any course from Area E*
Recommended elective: English 102

California State University, Long Beach:

The following courses meet lower division requirements for the tradition teacher preparation program consisting of a BA and yearlong 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
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. 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.

California State University, Los Angeles:
English 100
Speech 130
Philosophy 202, or Speech 235
Astronomy 101 and 101L, or Geology 101
Earth Science 110
Any biological lab science from Area 2 B*
(Zoology 120 recommended by CSU, Los Angeles)
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 102 or 105
Psychology 101
Geography 102
Foreign Language (one semester minimum)
One course from ANTH 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 101L), 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, 246B, or 248B
English 222+
English 248A+ or Philosophy 100
(+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).
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)
CD 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).

*REFERS TO AREAS DESIGNATED WITHIN THE CSU GENERAL EDUCATION CERTIFICATION REQUIREMENTS.

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-require 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 Cerritos 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		UNITS
TH 101	Introduction to the Theatre	3
TH 102	History of the Classical Theatre	3
TH 103	History of the Modern Theatre	3
TH 110	Fundamentals of Acting	3
TH 130A	Rehearsal and Performance I	1
TH 130B	Rehearsal and Performance II	2
TH 130C	Rehearsal and Performance III	3
TH 131A	Theatre Production I	1
TH 131B	Theatre Production II	2
CHOOSE ONE:		
TH 111	Intermediate Acting	3
TH 114	Voice for Acting	2
TH 115	Stage Movement and Combat	3
CHOOSE TWO:		
TH 120	Theatre Stagecraft	3
TH 221	Costuming for the Stage	3
TH 222	Stage Lighting	3
PLUS SIX (6) UNITS FROM AT LEAST TWO OF THE FOLLOWING:		
TH 108	Improvisation for the Theatre	3
TH 111	Intermediate Acting	3
TH 114	Voice for Acting	2
TH 115	Movement for the Actor	3
TH 120	Theatre Stagecraft	3
TH 123	Stage Make-Up	2
TH 136	Community Theatre Production	2
TH 212	Scene Study	3
TH 213	Historical Styles of Acting	3
TH 221	Costuming for the Stage	3
TH 222	Stage Lighting	3
TH 226	Introduction to Scene Design	2
MUS 146	Recording Techniques	2
MEDIA EMPHASIS (25 UNITS REQUIRED)		
TH 150	Appreciation and History of the Motion Picture	3
TH 151	Motion Pictures, Radio and Television	3
TH 152	Introduction to Broadcasting	3
TH 153	Motion Picture Production	2
TH 155	Radio Production	3
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 131A	Theatre Production I	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, children's 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	Beginning Arc 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	Advanced Arc Welding	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 Specialty Lab (2 labs required)	4
		27 (29)

PIPE WELDING OPTION—859

WELD 52	Pipe Welding Fundamentals	4
WELD 53	Pipe Layout	2
WELD 54L	Advanced Pipe Welding	2
WELD 130	Gas Tungsten Arc Welding Fundamentals	4
WELD 200	Intermediate Arc Welding	4
WELD 210L	Advanced Arc Welding	2
WELD 240	Advanced Gas Tungsten Arc Welding Lab	2
		35 (37)

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

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY		UNITS
BIOL 200	Principles of Biology	5
BIOL 201	Principles of Biology	5
CIS 178	Digital Computer Programming	3
MATH 116	Calculus for Managerial, Biological and Social Sciences	4

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 4 year college or university and completion of the Bachelor's Degree program, graduates qualify for graduate study and for employment with both public and private agencies in wildlife management and/or fisheries biology.

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

WOODWORKING MANUFACTURING TECHNOLOGIES—893
CERTIFICATE OF ACHIEVEMENT PROGRAM

BASIC CORE COURSE		UNITS
WMT 101	Introduction to Woodworking	2
WMT 102	Machine Wood Technology	4
WMT 103	Machine Wood Technology II	4
WMT 107	Wood Finishing	3
WMT 151	Introduction to Cabinetmaking	4
WMT 181	Introduction to Computer Operations for Cabinetmaking and Design	2.5
TM 50	Technical Mathematics	3
ART 20	Two-dimensional Design	3

AND TWELVE (12) UNITS SELECTED FROM THE FOLLOWING COURSES:

WMT 132	Chair Design and Construction	4
WMT 134	Frame Making	4
WMT 148	Furniture Making and Manufacturing	4
WMT 153	32MM System of Cabinetmaking	4
WMT 171	Introduction to Boat Building	3
WMT 202	Advanced Machine Wood Technology	4
WMT 211	The Workbench Class	4
WMT 212	Router and Router Tables	4
WMT 248	Production Furniture Making and Manufacturing	4
WMT 249L	Furniture Manufacturing Specialty	2.5
WMT 251	Advanced Cabinetmaking	2
WMT 253	Advanced 32MM System of Cabinetmaking	3
WMT 268	Production Cabinetmaking and Manufacturing	5
WMT 281	Advanced Computer Operations for Cabinetmaking and Design	2.5
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.

RE COMMENDED 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.

ZOOLOGY—695
TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY

		UNITS
MATH 116	Calculus for Managerial, Biological and Social Sciences	4
BIOL 200	Principles of Biology	(5)
BIOL 201	Principles of Biology	(5)
CHEM 111	General Chemistry	5
CHEM 112	General Chemistry	5
PHYS 101	General Physics	4
PHYS 102	General Physics	4

ADDITIONAL LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Long Beach:

MICR 200	Introduction to Microbiology	5
or GEOL 101	The Earth Environment	4

California State Polytechnic University - Pomona:

MICR 200	Introductory Microbiology	5
MATH 112	Mathematical Statistics	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: 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.

BUSINESS DIVISION

(562) 860-2451 EXT. 2715
Business Accounting
Business Administration
Business Administrative Support Systems
Business Communications
Business Court Reporting/Computerized Shorthand
Business Finance
Business Paralegal
Business Real Estate
International Studies

COUNSELING AND GUIDANCE DIVISION

(562) 860-2451 EXT. 2126
Counseling and Guidance

FINE ARTS AND COMMUNICATIONS DIVISION

(562) 860-2451 EXT. 2600
Art and Design
Journalism
Music
Photography
Theatre Arts

HEALTH OCCUPATIONS DIVISION

(562) 860-2451 EXT. 2550
Child Development
Child Development/Early Childhood
Child Development/Family Child Care
Child Development/Infant Toddler
Child Development/Instructional Aide
Child Development/Instructional Aide-Bilingual Education
Child Development/Parent Education
Child Development/School Age
Child Development/Special Education
Culinary Arts
Dental Assisting
Dental Hygiene
Health Occupations
Emergency Medical Technician
Medical Front Office
Medical Assistant
Nursing
Pharmacy Clerk
Pharmacy Technician
Physical Therapist Assistant
*Speech-Language Pathology
*(*Pending approval from Chancellor's Office)*

HPER / ATHLETICS DIVISION

(562) 860-2451 EXT. 2859
Health Education
Physical Education/Athletics
Recreation

HUMANITIES AND SOCIAL SCIENCES DIVISION

(562) 860-2451 EXT. 2750
Administration of Justice
Anthropology
Economics
History
Philosophy
Political Science
Psychology
Sociology

LIBERAL ARTS DIVISION

(562) 860-2451 EXT. 2858
English
English as a Second Language
French
German
Japanese
Reading
Sign Language
Spanish
Speech

SCIENCE, ENGINEERING, AND MATHEMATICS DIVISION

(562) 860-2451 EXT. 2660
Anatomy and Physiology
Astronomy
Biology
Botany
Chemistry
Computer and Information Sciences
Earth Science
Educational Technology
Energy
Engineering
Geography
Geology
Mathematics
Microbiology
Ornamental Horticulture
Physical Science
Physics
Zoology

TECHNOLOGY DIVISION

(562) 860-2451 EXT. 2912
Architecture
Automotive Collision Repair
Automotive Mechanical Repair
Cosmetology
Drafting
Electronics
Industrial Arts
Machine Moldmaking for Plastics
Machine Tool Technology
Manufacturing Technology
Metallurgy & Material Science
Plastics Manufacturing
Technical Mathematics
Welding
Woodworking Manufacturing Technologies

TECHNOLOGY TRAINING AND DISTANCE EDUCATION DIVISION

(562) 860-2451 EXT. 2837
Educational Technology

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

ACCOUNTING

SEE BUSA (Business Accounting / Finance)

ADMINISTRATION OF JUSTICE

(Humanities / Social Sciences Division)

The following courses have been developed by an Area Advisory Committee and are uniform in content with the offerings of most colleges and in conformance with guidelines from the California Community College Chancellor's office.

AJ 71
FIRST AID-ADMINISTRATION OF JUSTICE **2 UNITS**
Class hours: 2 lecture
Prerequisite: None.
This basic course in emergency first aid and cardiopulmonary resuscitation emphasizes how to recognize and render assistance to the ill or injured where there is an airway obstruction, respiratory arrest, cardiac arrest, severe bleeding, shock, actual or suspected fractures, head injuries, or other life-threatening environmental circumstances. This course meets the California Department of Health requirements as described in the California Administrative Code. A basic Red Cross Certificate will be issued to those students who successfully complete the course. (Formerly AJ 13)

AJ 91
REPORT WRITING PROCEDURES **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
This course includes the procedures and practices commonly used to gather data and prepare a variety of police records. Emphasis will be placed upon the need to use correct spelling, sentence structure, punctuation and vocabulary in criminal justice reports to meet statistical, legal and prosecution requirements of the criminal justice system. (Formerly AJ 11)

AJ 101 (CAN AJ 2)
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

AJ 102 (CAN AJ 4)
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

AJ 103
CRIMINAL PROCEDURES **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
This course provides a detailed examination of California criminal procedure, including the California court system, jurisdiction and venue, laws of arrest, grand jury proceedings, extradition, pre-trial procedures, conduct of criminal trials, rights of the defendant, post-trial motions and appeals, probation and parole. (Formerly AJ 3)
Transfer Credit: CSU;

AJ 104 (CAN AJ 6)
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

AJ 105
COMMUNITY RELATIONS **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
This course provides a study of the relationship between law enforcement agencies and the changing communities they serve. The student will compare various approaches to preventing crime and limiting the effects of crime on the individual and the community. The course will also focus on the ethics, politics and the professional image necessary to maintain positive rapport between law enforcement agencies and their communities. (Formerly AJ 5)
Transfer Credit: CSU; UC

AJ 110
CONCEPTS OF ENFORCEMENT SERVICES **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
This course explores the theories, philosophies and operational concepts of Law Enforcement Field Services, and examines the role expectations of the police field officer. Emphasis is placed upon patrol, traffic and public service responsibilities and their relationship to the total criminal justice system. (Formerly AJ 10)
Transfer Credit: CSU

AJ 130
TRAFFIC CONTROL AND INVESTIGATION **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
This course is an in-depth study of the California Vehicle Code, the enforcement of basic traffic laws, selective enforcement, public relations, highway safety engineering, and violator contact. Also included are accident investigation, skid mark analysis, preservation of evidence, hit and run investigation, the intoxicated driver, enforcement methods and psychology, and specialized traffic enforcement units. (Formerly AJ 30)
Transfer Credit: CSU

AJ 150
INTRODUCTION TO CORRECTIONS **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
This course introduces the student to the philosophy, history, functions and objectives of the system of corrections in the United States. It includes a study of correctional institutions, community based corrections, parole and probation. An overview of special problems and clientele, custody practices and procedures, and treatment technique will be stressed. (Formerly AJ 50)
Transfer Credit: CSU

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 220 (CAN AJ 8)
CRIMINAL INVESTIGATION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course stresses the fundamentals of investigation:crime scene search and recording, collection and preservation of physical evidence, scientific aids to investigation, modus operandi, sources of information, interviews and interrogation, follow-up investigation and case preparation. (Formerly AJ 20)
Transfer Credit: CSU

AJ 221
NARCOTICS AND VICE CONTROL 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is an introduction to the fields of narcotics and vice investigation. It examines the detection, suppression, apprehension and prosecution of narcotic and vice law violators. Field identification of controlled substances and their effects on the body are stressed. Laws relating to bookmaking, gambling, prostitution and morals offenses are also covered. (Formerly AJ 21)
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 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 equivalents 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 (CAN ANTH 2)
PHYSICAL ANTHROPOLOGY **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
This course is about the human past; where we came from and how we got to be the way we are today in terms of both biological and cultural evolution. The topics covered will include: the origin and development of the human species; heredity and population genetics; fossil evidence; 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 (CAN ANTH 6)
INTRODUCTION TO ARCHAEOLOGY **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
Archaeology is the study of mankind's past. This course will cover the history of archaeology, and explore the objectives and methods of modern archaeology. Today's archaeological curiosity is tempered by the scientific method; a combination of sciences in order to get a better grasp on a total understanding of people. This course will explore the world of the archaeologist in order to appreciate the impact that the study of antiquities has had in understanding modern human cultures. (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 11)
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.
Prerequisite:(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 50
INTRODUCTION TO COMPUTER AIDED DRAFTING FOR ARCHITECTURE 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.
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)
Transfer Credit: CSU

ARCH 51
ADVANCED APPLICATIONS OF COMPUTER AIDED DRAFTING FOR ARCHITECTURE 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: ARCH 50 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)
Transfer Credit: CSU

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 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 221
WORKING DRAWING / ARCHITECTURAL DESKTOP 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: ARCH 121, ARCH 50 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 AND DESIGN

(Fine Arts / Communications Division)

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 104
CONTEMPORARY ART PRACTICES 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: ART 101, ART102, or ART 103 or equivalent with grades of Credit or "C" or higher.
This course introduces the student to a variety of mediums and concepts for the purpose of expanding personal expression, as well as examining recent art developments. Conceptual art, performance, installation, and video art are among the approaches considered, with an emphasis on interdisciplinary forms. This course may be taken for a maximum of 6 units. (Formerly ART 4)
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. The course will consist of lecture, slide presentation, discussion, and analysis of representative art of the various periods. (Formerly ART 6)
Transfer Credit: CSU; UC

ART 107
ASIAN ART HISTORY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
Asian art history surveys the arts of India, Thailand, Cambodia, Vietnam, Java, China, Korea and Japan. Architecture, painting, sculpture, printmaking and other arts are examined within their philosophical, religious, intellectual and social contexts. (Formerly ART 8)
Transfer Credit: CSU; UC

ART 110 (CAN ART 8)
FREEHAND DRAWING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: None.
This is a beginningcourse in the history and appreciation, theory, and practice of representational and non-objective drawing technique, linear perspective, composition, and presentation. Lectures will include the historical development and appreciation of drawing from Western and non-Western cultures. (Formerly ART 10)
Transfer Credit: CSU; UC

ART 111
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 110 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 112 (CAN ART 24)
LIFE DRAWING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 110 or equivalent with a grade of Credit or "C" or higher.
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 113
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.
Transfer Credit: CSU

ART 115L
PRINTMAKING LAB **1 UNIT**
Class hours: 3 lab
Corequisite: 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 photo-screenprinting, collagraphy, embossing, and monotype. The course will increase the skill and creative output of the student in areas of his/her choice. This course may be taken for a maximum of 4 units. (Formerly ART 15)
Transfer Credit: CSU; UC

ART 116 (CAN ART 20)
BEGINNING 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 116 or equivalent with a grade of Credit or "C" or higher.
This is a course designed to further the student's investigation in the techniques of etching, collagraphy, 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

ART 120 (CAN ART 14)
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 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 121 (CAN ART 16)
THREE-DIMENSIONAL DESIGN **3 UNITS**
Class hours: 2 lecture/4 studio
Prerequisite: ART 120 or equivalent with a grade of Credit or "C" or higher.
This course will serve as an introduction to organization and problem solving in three-dimensions with an emphasis on formal concerns. It will also serve as an introduction to the materials, techniques and tools used in the making of three-dimensional forms. This course will emphasize the use and comprehension of the vocabulary of three-dimensional design and its application to the visual image. (Formerly ART 21)
Transfer Credit: CSU; UC

ART 130A (CAN ART 10)
FUNDAMENTALS OF PAINTING **3 UNITS**
Class hours: 2 lecture/4 studio
Prerequisite: None.
This course is an introduction to the material and creative processes of painting. Students learn how to think about pictorial space, how to structure composition, the characteristics and handling of paint, and the application of color theory. Painting is primarily from still-life, with the students' personal interpretation and use of imagination encouraged. This course may be taken for a maximum of 6 units. (Formerly ART 30. 1)
Transfer Credit: CSU; UC

ART 130B
FUNDAMENTALS OF PAINTING **3 UNITS**
Class hours:2 lecture/4 studio
Prerequisite: ART 130A or equivalent with a grade of Credit or "C" or higher.
This course is a continuation of ART 130A. The student works more deliberately with the expressive properties of color, value, and the organization of pictorial space. A variety of still life painting problems provide the student opportunity to discover his or her strengths and artistic persuasion. Lecture and critiques open the student to a deeper sensibility as well as an increased theoretical understanding of painting. This course may be taken for a maximum of 6 units. (Formerly ART 30. 2)
Transfer Credit: CSU; UC

ART 133A
WATERCOLOR PAINTING **3 UNITS**
Class hours: 1 lecture/5 studio
Prerequisite: None.
This introductory course pursues the study of the various techniques and methods of watercolor as used by artists today:transparent, opaque, dry brush, glazing, mixed media, egg tempera, air brush, and colored pencils. Emphasis is placed on traditional, modern, and oriental approaches as relative to other art studies, such as drawing, design, calligraphy, oil painting, and history. The student will be directed towards developing skills in the painting of still life, landscape, figure, portrait, and abstraction. (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 is a continuation of the procedures and studies begun in ART 133A. Emphasis is on acquiring further skills and experiences in various watercolor techniques and practices. Students are expected to learn how to properly mat, glass, and frame paintings for exhibition and display. (Formerly ART 33. 2)
Transfer Credit: CSU; UC

ART 134
WATERCOLOR LANDSCAPE PAINTING I **2 UNITS**
Class hours: 1 lecture/3 studio
Prerequisite: None.
This course emphasizes problems, concepts and skills of landscape (and seascape) watercolor painting. (Formerly ART 34)
Transfer Credit: CSU; UC

ART 135
WATERCOLOR LANDSCAPE PAINTING II **2 UNITS**
Class hours: 1 lecture/3 studio
Prerequisite:None.
Recommendation: ART 134 or equivalent with a grade of Credit or "C" or higher.
This course emphasizes new 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
BEGINNING 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 fundamental course in painting designed 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; UC

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; UC

ART 156L
CERAMICS LAB **1 UNIT**
Class hours: 4 lab. Open entry/open exit (17 weeks)
Prerequisite: None.
Corequisite: ART 150, ART 151, ART 152, ART 252, ART 253, ART 155, 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 160
LIFE MODELING **2 UNITS**
Class hours: 1 lecture/3 studio
Prerequisite: None.
This is acourse designed to familiarize the student with the human figure, itsinner and surface structure, and techniques of sculpturing the figure in modeling materials. (Formerly ART 60)
Transfer Credit: CSU; UC

ART 162 (CAN ART 12)
SCULPTURE I **3 UNITS**
Class hours: 2 lecture/4 studio
Prerequisite: None.
Recommendation:ART 121 or equivalent with a grade of Credit or "C" or higher.
This course is designed as an introduction to the ideas, techniques, and materials involved in the making of sculptural forms. (Formerly ART 62)
Transfer Credit: CSU; UC

ART 163
SCULPTURE II **3 UNITS**
Class hours:2 lecture/4 studio
Prerequisite:None.
Corequisite:None.
Recommendation:ART 162 or equivalent with a grade of Credit or "C" or higher strongly recommended.
This course is a continuation of ART 162, Sculpture I. New ideas, techniques, and materials for making sculpture are introduced. This course may be taken for a maximum of 6 units. (Formerly ART 63)
Transfer Credit: CSU; UC

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. The areas of lamination, fabrication, and substractive 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 courseexplores the history, theory, and techniques which shape letterforms, past and present. Emphasis will be on developing skill and knowledge through the historical study of calligraphy and the manipulation of tools and materials. The Roman style will be studied through a modular approach beginning with linear forms, then broad pen sans serif forms, and finally Humanist Bookhand. An appreciation for color, design, and the aesthetic qualities of letter forms will be stressed in their contemporary usage. This course may be taken for a maximum of 6 units. (Formerly ART 40)
Transfer Credit: CSU

ART 181
CALLIGRAPHY II 3 UNITS
Class hours:2 lecture/4 studio
Prerequisite:ART 180 or equivalent with a grade of Credit or "C" or higher.
This course focuses on the development of the Italic letterforms in addition to the continued study of the historical development of letterforms, past and present. Emphasis will be on the continued in-depth development and refinement of calligraphic skills and knowledge. Various styles of Italic will be studied in conjunction with a review of the Roman styles of the previous semester. Calligraphy II will continue to stress an appreciation for the color, design, and aesthetic properties of quality letterforms in their contemporary usage. This course may be taken 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 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, felttips, 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.
Page design and layout systems for electronic desktop publishing provide the basis for this course. The use of typography, scanned-in material such as drawings and photographs, and the manipulation of images will also be explored with regard to the requirements of the printing, publishing, and packaging industries. Hands-on experience is emphasized. (Formerly ART 48. 1)
Transfer Credit: CSU

ART 189L
COMPUTER GRAPHICS LAB 1 UNIT
Class hours: 3 lab
Prerequisite: None.
Corequisite: ART 182A, ART 182B, ART 184, ART 284, ART 186, ART 188, ART 192, ART 195, ART 196, 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 an understanding of modeling and rendering software tools, and animation concepts. (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 a bridge connecting conventional drawing and painting tools and techniques with their computer counterparts. Specifically, this course explores color theory, art history and conventional media, and demonstrates how to translate foundational art theory using digital painting tools. It addresses the needs of students making the transition from traditional to digital media. This course may be taken for a maximum of 6 units.
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; UC

ART 214
SPECIAL STUDIES IN LIFE DRAWING **3 UNITS**
Class hours: 2 lecture/4 studio
Prerequisite: ART 213 or equivalent with a grade of Credit or "C" or higher.
This course offers advanced work in figure drawing. Emphasis is placed on the student's development of personal style. The pictorial space of the drawing is given the same importance as in a painting, and the student seeks to elevate the classroom sketch to a well designed and effective work of art. The course considers the relationship between the student's intentions in drawing to his or her work in other media, such as painting or sculpture. Focus is placed on the personal and creative aspects of drawing, how and what a drawing communicates, developing an advanced technique, and using professional materials. This course may be repeated for a maximum of 6 units. (Formerly ART 14)
Transfer Credit: CSU; UC

ART 218
SCREENPRINTING **3 UNITS**
Class hours: 2 lecture/4 studio
Prerequisite: ART 117 or equivalent with a grade of Credit or "C" or higher.
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; UC

ART 219
ADVANCED ETCHING **3 UNITS**
Class hours:2 lecture/4 studio
Prerequisite:ART 117 or equivalent with a grade of Credit or "C" or higher.
This course is designed to investigate the various techniques of advanced etching, including grounds, aquatints, photo etching, and viscosity printing. Also, collagraphy, 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 130B or equivalent with a grade of Credit or "C" or higher.
This course is designed for students who want a deeper understanding of painting:its history, theories, creative purposes, and technical skills. Through lectures, discussions, and studio work, students discover, articulate, and bring into being their own artistic identity and style. Practical assistance is given on an individual basis. Emphasis is placed on the student's progression from idea to technical means and visual accomplishment. Students may initiate their own painting projects, or use what subject matter is presented to the class. This course may be taken 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 237
LIFE PAINTING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 112 or equivalent with a grade of Credit or "C" or higher.
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 246
JEWELRY DESIGN FABRICATION 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite:ART 145 or equivalent with a grade of Credit or "C" or higher.
This is the third course in a sequential program covering the design and technical processes of jewelry and metalsmithing. The techniques and projects covered are fabricating a die-formed container, stone setting, mold making, and lost wax casting of multiples. The study of the history and culture of jewelry and body ornamentation is continued through audio/visual lectures and museum and gallery visits. This class may be repeated for a maximum of 6 units. (Formerly ART 76)

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
FORMS AND TECHNIQUES 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 wheelthrowing 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
INTERMEDIATE CERAMICS I 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

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 III **3 UNITS**
Class hours: 2 lecture/4 studio
Prerequisite:None.
Corequisite:None.
Recommendation:ART 163 or equivalent with a grade of Credit or "C" or higher strongly recommended.
This course is designed to extend the student's knowledge and skill in the specific discipline of subtractive sculpture. The student will learn how to make sculpture by traditional stonecarving techniques. This course may be taken for a maximum of 9 units. (Formerly ART 64)
Transfer Credit: CSU; UC

ART 265
SCULPTURE IV **3 UNITS**
Class hours: 2 lecture/4 studio
Prerequisite:None.
Corequisite:None.
Recommendation:ART 163 and WELD 100 or equivalent with grades 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 additive steel sculpture. The student will learn how to use welding processes to create sculptural forms in steel. This course may be taken for a maximum of 9 units. (Formerly ART 65)
Transfer Credit: CSU

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 I **2 UNITS**
Class hours: l lecture/3 studio
Prerequisite:ART 181 or equivalent with a grade of Credit or "C" or higher.
This intermediate course of study focuses on the artistic and aesthetic uses of letterforms as cultural and communicative forces in society. Students will progress toward the development of professional skills and techniques in the application of lettering, calligraphy and typography to creative and expressive concepts. Historical and contemporary methods, materials and usage will be explored through a variety of projects. This course may be taken for a maximum of 4 units. (Formerly ART 47)
Transfer Credit: CSU

ART 287B
LETTER ARTS II **2 UNITS**
Class hours: l 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 letterforms for contemporary applications in aesthetic and communicative areas. Expertise and knowledge will be expanded through the exploration of tools, materials, and techniques. This course may be taken for a maximum of 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 101L
OBSERVATIONAL ASTRONOMY **1 UNIT**
Class hours: 3 lab
Prerequisite: ASTR 101 or equivalent with a grade of Credit or "C" or higher.
Laboratory 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)
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

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

AUTOMOTIVE COLLISION REPAIR (AUTOBODY)

(Technology Division)

AB 1 (Not degree applicable)
AUTOMOTIVE COLLISION DAMAGE ESTIMATING I **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 build the students' skills in effective collision damage estimating. Major emphasis will be placed on body construction types and designs, welding and repair methods, and mechanical and electrical components including safety systems as they relate to the estimating of collision damage. Students will complete hand-written and/or computerized estimates itemizing cost of labor, materials, and parts required to restore minor-damaged vehicles to pre-accident condition. Areas of training include the basic estimating process, hand-written estimates, body and fender judgment repair times and industry standard times for part replacements. Appropriate safety related instructions will be introduced to as students demonstrate increased estimating proficiency. This course may be repeated for a maximum of 6 units. (Formerly AB 24)

AB 2 (Not degree applicable)
AUTOMOTIVE PAINT-COLOR MATCHING **3 UNITS**
Class hours: 2.5 lecture/1.5 lab
Prerequisite: AB 61 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
This course increases the marketable skills for the automotive refinisher in the trade. It includes color and texture matching, toning and tinting, use of automotive toners from scratch mixing to the use of tintometers, blending techniques, and paint chemistry. It includes compatibility and trouble shooting of materials. Appropriate safety related instructions will be included in each segment. This course may be taken for a maximum of 9 units. (Formerly AB 33. 1)

AB 42 (Not degree applicable)
COLLISION REPAIR V **5 UNITS**
Class hours: 4 lecture/4 lab
Prerequisite: AB 54 or equivalent with a grade of Credit or "C" or higher.
This course emphasizes frame and structural repair. Instruction will include: the replacement of major body members and panels, removal and replacement of major power train supports; applied measuring, gauging and analysis of major structural damage. Also gauging and measuring of strut and strut towers as well as alignment of these members will be included. Appropriate safety related instructions will be included in each segment. This course may be taken for a maximum of 10 units.

AB 45 (Not degree applicable)
LETTERING, STRIPING AND DESIGN **2 UNITS**
Class hours: 2 lecture/2 lab
Prerequisite:None.
This course is designed to instruct the student in the arts of lettering, design, and pin striping. Students will be working with lines, colors, and comparison/contrast concepts to create special effects on commercial and passenger vehicles using a wide range of different materials. This course may be taken for a maximum of 4 units. (Formerly AB 69. 3)

AB 51
COLLISION REPAIR I **5 UNITS**
Class hours: 4 lecture/4 lab
Prerequisite: None.
This course will cover the basic aspects of automotive collision repair trade. Major emphasis will be placed on orienting the student to specific welding procedures used in the automotive trade, basic use of power and hand tools including safety, use of fillers as well as straightening techniques, and discussion on automobile design, nomenclature and damage analysis. Appropriate safety related instructions will be included in each segment. (Formerly AB 11)

AB 52
COLLISION REPAIR II **5 UNITS**
Class hours: 4 lecture/4 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 further knowledge of 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. Appropriate safety related instructions will be included in each segment. This course may be taken for a maximum of 10 units. (Formerly AB 21)

AB 53
COLLISION REPAIR III **5 UNITS**
Class hours: 4 lecture/4 lab
Prerequisite: AB 52 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
This course is an introduction to wheel alignment, suspension systems, and power train problems related to automotive collision including frame straightening systems, measurement and gauging for damage, cooling and electrical components, and continued welding and metallurgical experience. Appropriate safety related instructions will be included in each segment. This course may be taken for a maximum of 10 units. (Formerly AB 31. 1)

AB 54
COLLISION REPAIR IV 5 UNITS
Class hours: 4 lecture/4 lab
Prerequisite: AB 53 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
This course emphasizes automotive sheet metal alignment, aluminum panel repair, fiberglass and composite body panel repair, installation of structural members, and removal and replacement of electrical and electronic components and interior parts. Appropriate safety related instructions will be included in each segment. This course may be taken for a maximum of 10 units. (Formerly AB 41)

AB 56
AUTOMOTIVE WELDING 2 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
This course gives an orientation and introduction to oxy-acetylene metal inert gas, stick arc, and resistance welding. It is designed for the student and/or technician who is presently employed in the automotive field. Related technical subjects include safety, testing of joints, design, strength of materials, process selection, cutting methods and metals identification. Recommended for automotive technology majors also. Appropriate safety related instructions will be included in each segment. (Formerly AB 12)

AB 57
ADVANCED AUTOMOTIVE WELDING 2 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: AB 56 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
This is a course to further develop the students' skills in the use of metal inert gas (MIG) welding equipment and methods related to the repair, maintenance and alteration of the automobile. Special emphasis will be placed upon metal inert gas welding of high strength steel, aluminum, plasma arc and oxy-acetylene cutting. Appropriate safety related instructions will be included in each segment. This course may be taken for a maximum of 6 units. (Formerly AB 22)

AB 61
AUTOMOTIVE REFINISHING I 5 UNITS
Class hours:4 lecture/4 lab
Prerequisite:AB 51 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
This course is designed to introduce the beginning techniques for refinishing preparation and spray gun techniques. It includes basic use of abrasives, primers, and sealers. Students are instructed in the use of solvents, pre-coat, and basic material problems encountered in today's refinishing market. Appropriate safety related instructions are included in each segment. This course may be taken for a maximum of 10 units. (Formerly AB 25)

AB 62
AUTOMOTIVE REFINISHING II 5 UNITS
Class hours:4 lecture/4 lab
Prerequisite:AB 61 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
This course furthers the skills of the professional refinisher and the advanced student. Students will be instructed in the art of tinting colors, spot repair of factory and after-market finishes, overall refinishing, interior/exterior care and maintenance, as well as refinishing of plastic components to include adhesion, dying, and color application. There will also be testing, research and development of current refinishing materials. I-CAR certification criteria will be incorporated in the training and discussions. Appropriate safety related instructions will be included in each segment. This course may be taken for a maximum of 10 units. (Formerly AB 35)

AB 63
PRODUCTION AUTOMOTIVE REFINISHING III 5 UNITS
Class hours: 4 lecture/4 lab
Prerequisite: AB 62 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
In this course students learn to specialize in simultaneous refinishing of multiple vehicles, including small dent repair, color matching and blending, overall refinishing, finish analysis, problem solving, vehicle detailing, using the most up-to-date high-volume techniques and materials. Areas covered include repair of minor body dings, preparation and mixing of colors, and masking and painting three separate vehicles of varying models, colors, and types. This course provides students with hands-on techniques for increasing
the number of vehicles processed in the automotive refinishing environment. Approved safety instructions are included in each segment. This course may be taken for a maximum of 20 units. (Formerly AB 35. 1)

AB 70
COLLISION REPAIR SPECIALTY-A 5 UNITS
Class hours: 4 lecture/4 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 to update the student in areas of his/her choice. It emphasizes refinishing of plastics, composite components, metal finishing, complex frame and structural repair, and advanced welding. Appropriate safety related instructions will be included in each segment. This course may be taken for a maximum of 15 units. (Formerly AB 48)

AB 71
COLLISION REPAIR SPECIALTY-B 10 UNITS
Class hours: 8 lecture/8 lab
Prerequisite: Fifteen units of auto collision repair or equivalent with grades of Credit or "C" or higher.
This course is designed to increase skill and knowledge as well as update the student in areas of his/her choice. This course will emphasize refinishing and plastic techniques, metal finishing, continued frame and structural repair, and continued welding. Appropriate safety related instructions will be included in each segment. This course may be taken for a maximum of 20 units. (Formerly AB 49)

AB 72
AUTO BODY MANAGEMENT SPECIALTY 3 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: Nine units of collision repair estimating and/or management or equivalent with grades of Credit or "C" or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course increases skills and knowledge in collision repair estimating, management, and customer relations for students considering a career in the auto body repair industry. It includes computerized automotive damage estimating, shop management, customer relations, and communications. Appropriate safety-related instructions are included in each segment. This course may be taken for a maximum of 12 units. (Formerly AB 49. 1)

AB 73/74
AUTOMOTIVE COLLISION REPAIR OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Automotive Collision Repair work experience 73 or 20 hours of employment per week for Automotive Collision Repair work experience 74. The employment must be in a job related to the student's educational goal.
Corequisite: (1) Concurrent enrollment in the Automotive Collision Repair vocational program with 7 or more units including occupational work experience.
Work experience/career internship provides the opportunity for Automotive Collision Repair students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to the major and job skills must be completed on the job/training site. These courses may be taken for a maximum of 15-16 units.

AB 80
AUTOBODY CUSTOMER SERVICE 2 UNITS
Class hours: 4 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course develops effective customer service in an automotive collision repair facility. Students learn appropriate use of terminology related to the collision repair industry, 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 82
COLLISION DAMAGE ESTIMATING II 3 UNITS
Class hours: 2.5 lecture/1.5 lab
Prerequisite: AB 1 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
This course extends the students skills in effective collision damage estimating. The students will demonstrate the wide range of skills needed to effectively inspect major damaged vehicles, determine the extent of damage and indicate the best method of repair. Students will demonstrate their skills in handwritten and computerized estimates, itemizing the cost of labor, materials, and parts required to restore the vehicle to its pre-accident condition. Areas of training include computerized estimating procedures, automotive industry standards, rules and regulations, identification of job functions, and methods of determining levels of customer service (CSI). Additional training is provided in the area of process improvement and time management. Electronic estimating skills will be developed. This course may be taken for a maximum of 6 units. (Formerly AB 34. 1)

AB 83
COMPUTER ESTIMATING SPECIALTY 1.5 UNITS
Class hours: 3 lecture/1 lab (9 weeks)
Prerequisite: AB 82 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
The focus of this course is for students to become proficient in one specific automotive damage-estimating program. Students will learn to properly identify vehicles, components and systems, and to select and input the appropriate replacement parts and labor costs into an estimate within the computer system. Topics included in this course are development of customer and insurance company profiles, and the generation of supplemental damage reports as currently used in the collision repair industry. The processes and methods used within the estimating program will be reviewed extensively. This course may be taken for a maximum of 6 units. (Formerly AB 34. 2)

AB 85
COLLISION REPAIR MANAGEMENT 3 UNITS
Class hours: 2 1/2 lecture/1 1/2 lab
Prerequisite: None.
Recommendation: None.
This course expands the students' abilities in effective management and operation of automotive repair facilities. Students are introduced to the wide range of skills required in today's effective direction, management and promotion of an automotive repair facility. Areas of training include rules and regulations related to the automotive repair industry, job-costing, equipment and material procurement, facility cost analysis, safety, employee and right-to-know issues, and warranties. Other topics include department operations, job function identification, compensation packages, production control, capacity planning, customer satisfaction, licensing and certification of company personnel, effective communication skills that reflect support of multicultural environment, process improvement methods, and time management. Electronic estimating and production control methods are covered. This course may be taken for a maximum of 6 units. (Formerly AB 51)

AB 86
COLLISION REPAIR PRODUCTION 2 UNITS
Class hours: 4 lecture (9 weeks)
Prerequisite: AB 85 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course furthers effective management of production and flow of work in an automotive repair facility. The course includes job analysis, task prioritizing, job descriptions, flow-charting, capacity planning, parts and material procurement, production controls, and development of key controls for management. This course may be taken for maximum of 8 units. (Formerly AB 52)

AB 287
ADVANCED COLLISION REPAIR MANAGEMENT 2 UNITS
Class hours: 4 lecture (9 weeks)
Prerequsiite: None.
Corequisite: None.
Recommendation: None.
This course expands abilities in effective management and operation of automotive collision repair facilities. The course includes presentation of the wide range of skills required to effectively direct, manage and promote a repair facility. Areas of 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, and consolidation and franchise body shop operations. This course may be taken for a maximum of 8 units. (Formerly AB 53)
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 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 **0 UNIT**
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 systems and enter the work environment with basic skills. (Formerly AUTO 1. 2)

AUTO 3
LUBRICATION AND COOLING **0 UNIT**
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 **0 UNIT**
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 **0 UNIT**
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 **0 UNIT**
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 8 (Not degree applicable)
FORD ELECTRONIC ENGINE CONTROLS EEC 3 & 4 **1 UNIT**
Class hours: 1 lecture
Prerequisite:None.
A theory/practical course in the operation and diagnosing of Ford electronic engine controls, including driveability problem areas such as electronic ignition, feedback carburetion, onboard diagnostic systems, and electronic fuel injection. (Formerly AUTO 50)

AUTO 9 (Not degree applicable)
CHRYSLER ELECTRONIC FUEL INJECTION **1 UNIT**
Class hours: 1 lecture
Prerequisite:None.
A theory/practical course in the operation and diagnosing of Chrysler electronic engine controls, including driveability problem areas such as electronic ignition, feedback carburetion, onboard diagnostic systems, and electronic fuel injection. (Formerly AUTO 51)

AUTO 10 (Not degree applicable)
GENERAL MOTORS FUEL INJECTION **1 UNIT**
Class hours: 1 lecture
Prerequisite:None.
A theory/practical course in the operation and diagnosing of General Motors electronic engine controls, including driveability problem areas such as electronic ignition, feedback carburetion, onboard diagnostic systems, and electronic fuel injection. (Formerly AUTO 52)

AUTO 11 (Not degree applicable)
FOUR WHEEL ALIGNMENT **1 UNIT**
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 53)

AUTO 12 (Not degree applicable)
GENERAL MOTORS CLIMATE CONTROL **1 UNIT**
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 54)

AUTO 13 (Not degree applicable)
SPECIALIZED ELECTRONICS TRAINING **2.5 UNITS**
Class hours: 2. 25 lecture/2. 25 lab
Prerequisite:None.
This course is a study of the principles of automotive electronics to include fundamentals, circuits, meter use, repair, and microprocessors. (Formerly AUTO 56)

AUTO 14 (Not degree applicable)
IMPORT FUEL INJECTION SYSTEMS 1 UNIT
Class hours: 1 lecture
Prerequisite:None.
A theory/practical course in the operation and diagnosing of Nissan, Toyota, and Bosch electronic engine controls, including driveability problem areas such as electronic ignition, feedback carburetion, onboard diagnostic systems, and electronic fuel injection. (Formerly AUTO 57)

AUTO 50
INTRODUCTION TO AUTOMOTIVE 3 UNITS
Class hours: 3 lecture
Prerequisite:None.
Corequisite:None.
Recommendation:None.
This introductory course deals with the basic systems of the modern automobile with emphasis on operating principles. Major areas of instruction will include electrical, engine, transmission, brake and accessory systems. The course is designed as an entry level automotive offering so students may survey the automotive service industry. (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 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. (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 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/4lab
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 theory/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 theory/practical course in basic electricity and automotive electrical systems, such as battery, starting, charging, and electronic ignition systems. The content will be presented on a single manufacturer's product line. (Formerly AUTO 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 theory/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 theory/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 I00 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

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, drive line, 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 23 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 - 1993 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 a Class "A" Installer's 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 modernautomobile; 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, or appropriate work experience.
This course is focused on the principles of automatic transmissions and transaxles. Procedures for diagnosing troubles, adjusting, and overhauling the automatic transmission and transaxle are studied and applied in the shop. This course may be taken 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

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 33)
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, electronic engine controls 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 skill and knowledge of the student in areas 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)

BIOL 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

BIOL 105
MAN AND ENVIRONMENT **3 UNITS**
Class hours: 3 lecture
Recommendation: Satisfactory completion of the English Placement Process for ENGL 100 clearance or ENGL 52 or equivalent with a grade of Credit or "C" or higher.
This course is designed to help both science and nonscience majors to develop a better understanding of some of the important environmental problems facing mankind. The nature and implications of subjects such as loss of genetic variability, pollution problems, overpopulation, and the use and abuse of natural resources, will be studied. There will be an emphasis on the interrelatedness of these problems and how an understanding of environmental principles can help us to live on this planet more intelligently and more successfully. (Formerly BIOL 1)
Transfer Credit: CSU; UC

BIOL 110
CALIFORNIA ANIMALS AND PLANTS **3 UNITS**
Class hours: 2 lecture, 3 lab or field work.
Recommendation: Satisfactory completion of the English Placement Process for ENGL 100 clearance or ENGL 52 or equivalent with a grade of Credit or "C" or higher.
The common plants and animals of California are studied with emphasis upon those local forms which can be readily collected or observed. The lecture is designed to familiarize the student with the life history and identification of local species of plants and animals and to aid in the understanding of the relationship of these organisms to their environment. The laboratory and field work emphasize ecological principles and taxonomic identification. (Formerly BIOL 12)
Transfer Credit: CSU; UC

BIOL 115
MARINE BIOLOGY **3 UNITS**
Class hours: 2 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This introductory course in marine biology is concerned with the adaptations, ecological relationships, economic importance, and identification of marine animals and plants. Emphasis is on the intertidal and offshore communities of California with frequent field trips to observe live specimens and study the marine environment. (Formerly BIOL 90)
Transfer Credit: CSU; UC

BIOL 120
INTRODUCTION TO BIOLOGICAL SCIENCE **4 UNITS**
Class hours: 3 lecture/3 lab
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course is designed for non-biological science majors. It covers basic principles of life science, including cellular biology, the plant and animal kingdoms, ecology, genetics, and evolution. Emphasis is also placed on human biology as it relates to everyday living. (Formerly BIOL 10)
Transfer Credit: CSU; UC

BIOL 180L
LIFE SCIENCE PREPARATIONS **1 UNIT**
Class hours: 3 lab
Prerequisite:BIOL 120 or equivalent with a grade of Credit or "C" or higher.
This course is designed for pre-teaching, life science majors. The student will learn the use and care of laboratory apparatus through actual experience in the classroom. The student will assist the instructor in the laboratory by performing such jobs as helping to prepare demonstrations, designing displays, and aiding individuals in the class. This course may be taken for a maximum of 2 units. (Formerly BIOL 20. 16)
Transfer Credit: CSU

BIOL 200 (CAN BIOL SEQ A)
PRINCIPLES OF BIOLOGY **5 UNITS**
Class hours: 3 lecture/2 quiz/4 lab
Prerequisite: CHEM 111 or equivalent with a grade of Credit or "C" or higher 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 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 Division)

BUSA 1T (Not degree applicable)
ACCOUNTING MICROCOMPUTER TUTORIAL **0 UNIT**
Class hours: 2 lab
Prerequisite: None.
Corequisite: Enrollment in one or more Business Accounting (BUSA) or Business Finance (BUSF) course(s).
Recommendation: None.
This course is designed to provide individual tutorial instruction for students studying computerized accounting to facilitate and reinforce their ability to complete assigned computerized projects. (Formerly BUSA 98)

BUSA 2T (Not degree applicable)
ACCOUNTING TUTORIAL **0 UNIT**
Class hours: 2 lab
Prerequisite: None.
Corequisite: BUSA 100, BUSA 101, or BUSA 102.
Recommendation: None.
This course is designed to provide individualized tutorial instruction with assigned problems and practice sets for introductory accounting students. (Formerly BUSA 99)

BUSA 60
QUICKBOOKS ACCOUNTING **1.5 UNITS**
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
Corequisite: BUSA 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 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 (CAN BUS SEQ A)(CAN BUS 2)
FUNDAMENTALS OF ACCOUNTING I **4 UNITS**
Class hours: 3 lecture/2 lab
Prerequisite: BUSA 100 or equivalent with a grade of Credit or "C" or higher.
This course covers the basic concepts used by businesses for financial accounting. The course includes a study of:the accounting concepts and techniques essential to the administration of a business enterprise; measuring and communicating economic information; analyzing and recording financial transactions; and the preparation of financial statements for sole proprietorships, partnerships, and corporations. (Formerly BUSA 11)
Transfer Credit: CSU; UC

BUSA 102 (CAN BUS SEQ A)(CAN BUS 4)
FUNDAMENTALS OF ACCOUNTING II **4 UNITS**
Class hours: 3 lecture/2 lab
Prerequisite: BUSA 101 or equivalent with a grade of Credit or "C" or higher.
This course covers the basic concepts used by businesses for managerial accounting. The course includes a study of:managerial accounting concepts and systems; job order cost systems; analyses for managerial decision making; planning, and control techniques and principles. (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

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 standard 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.
This course is designed to teach students the application of accounting functions using the IBM compatible microcomputer and spreadsheet accounting software. The accounting concepts will include corporation financial statements, financial ratios, manufacturing accounting, plant assets, accounts and notes receivable, inventory valuation, notes payable, budgeting, and forecasting utilizing generally accepted accounting principles. (Formerly BUSA 34)
Transfer Credit: CSU

BUSA 171
BUSINESS ACCOUNTING OCCUPATIONAL WORK EXPERIENCE 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: Enrollment in 7 or more units, including Business Accounting Occupational Work Experience, in a declared business major. One unit of Business Accounting Occupational Work Experience requires 60 non-paid hours or 75 paid hours of work per semester.
Recommendation: None.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken for a maximum of 3 units. (Formerly BUSA 71)
Transfer Credit: CSU

BUSA 172
BUSINESS ACCOUNTING OCCUPATIONAL WORK EXPERIENCE 2 UNITS
Class hours: 1 lecture
Prerequisite: None.
Corequisite: Enrollment in 7 or more units, including Business Accounting Occupational Work Experience, in a declared business major. Two units of Business Accounting Occupational Work Experience require 120 non-paid hours of work or 150 paid hours of work per semester.
Recommendation: None.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. 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 corporation form of business organizations. The emphasis of the course is on the sequential study of the various classifications and items of the balance sheet, including current and non-current assets. (Formerly BUSA 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, funds-flow and cash-flow reporting; and the study of A. P. B. 's

(Accounting Principles Board Bulletins) and F. A. S. B. 's (Financial Accounting Standard Board pronouncements). (Formerly BUSA 22)
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 251
ADVANCED INCOME TAX ACCOUNTING 3 UNITS
Class hours: 3 lecture
Prerequisite:BUSA 250 or equivalent with a grade of Credit or "C" or higher.
This will be a continuation of BUSA 250 and will cover taxpayers other than individuals. It is designed to fill the needs of the student who desires knowledge of the Federal Income Tax implications of partnerships, corporations, tax option corporations and a general overview of estates, trusts, and gift taxation. This course reflects the tax laws of the Tax Reform Act of 1986:Public Law 99-514. (Formerly BUSA 51. 1)
Transfer Credit: CSU

BUSA 270
FUNDAMENTALS OF AUDITING 3 UNITS
Class hours: 3 lecture
Prerequisite: BUSA 202 or equivalent with a grade of Credit or "C" or higher.
This course covers the process of examining and evaluating financial conditions and records. It is designed to provide a basis for an opinion concerning the reliability of the records, as evidenced by a written audit report. (Formerly BUSA 70)
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

BUSINESS ADMINISTRATION

(Business Division)

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.
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 53
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 will cover such topics as: self-evaluation, sources of capital and credit, franchising, distribution of goods, organizational structures, retailing, wholesaling and manufacturing. It will briefly cover the practical aspects of record keeping, planning, and controlling. (Formerly BA 41)

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 solve 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 61
EVERYDAY 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; and the areas of contracts, property rights, negligence, wills, business organizations, marriage and divorce, real estate, bankruptcy, and consumer protection. (Formerly BA 16)

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, mannerisms, numbers, space, and political and religious beliefs will be highlighted as to their importance in establishing viable and profitable contacts between individuals, cultures, and nations. (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 (CAN BUS 8)
BUSINESS LAW **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
This is a course designed to introduce the student to the legal concepts of everyday business transactions. It will include discussions of legal rights, contracts, Universal Commercial Code (UCC) sales, negotiable instruments, and the structure of our judicial system. This course meet 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 survey course designed to acquaint the student with the legal aspects of the business world. It will cover bailments, personal property, real property, agency, partnerships, corporations, wills, trusts, secured interests, and international law. (Formerly BA 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

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 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 172
BUSINESS ADMINISTRATION OCCUPATIONAL WORK EXPERIENCE 2 UNITS
Class hours: 1 lecture
Prerequisite: None.
Corequisite: Enrollment in 7 or more units, including Business Administration Occupational Work Experience, in a declared business major. Two units of Business Administration Occupational Work Experience require 120 non-paid hours of work or 150 paid hours of work per semester.
Recommendation: None.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken for a maximum of 6 units. (Formerly BA 72)
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

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 awareness and appreciation of staff-supported activities in an organization. The inter-reaction of the various departments and the work flow are analyzed for the purpose of developing a cooperative attitude among personnel of the various departments. (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 class prepares the student to pass the national certification examination conducted by APICS (American Production and Inventory Control Society). (Formerly BA 91)
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 ADMINISTRATIVE SUPPORT SYSTEMS

(Business Division)

BASS 1T (Not degree applicable)
INDIVIDUALIZED OFFICE SKILLS 0 UNIT
Class hours: 3 lab, open entry/open exit (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 3T (Not degree applicable)
WORD PROCESSING / TUTORIAL 0 UNIT
Class hours:1 lab
Prerequisite:None.
Corequisite:Enrollment in any word processing course.
This course is designed to facilitate and reinforce the learning of word processing functions, skills, and concepts through individualized and mediated instruction. It is open to any student enrolled in any word processing course. (Formerly BASS 3)

BASS 36T (Not degree applicable)
TYPING / TUTORIAL 0 UNIT
Class hours: 1 lab
Prerequisite:None.
Corequisite:Enrollment in any Business Administrative Support Systems typing course.
Recommendation: None.
This course is designed to facilitate and reinforce the learning of typing skills and formatting theory through individualized instruction. (Formerly BASS 36)

BASS 50
ADVANCED WORDPERFECT FOR WINDOWS 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: BASS 108 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: Concurrent enrollment in BASS 3T.
This course offers students opportunities to build advanced skills, speed, and problem-solving abilities using WordPerfect for Windows software. (Formerly BASS 9)

BASS 51
ADVANCED MICROSOFT WORD FOR WINDOWS 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite:BASS 112 or equivalent with a grade of Credit or "C" or higher.
Recommendation: Concurrent enrollment in BASS 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 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.

BASS 61
TYPING / KEYBOARDING REVIEW 2 UNITS
Class hours:2 lecture/1 lab
Prerequisite:Typewriter keyboard skills and ability to type 25 wpm.
Recommendation: Concurrent enrollment in BASS 36T.
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 62
COMPUTER KEYBOARDING 1 UNIT
Class hours:2 lecture/1 lab (9 weeks)
Prerequisite:None.
Recommendation: Concurrent enrollment in BASS 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 70
MEDICAL MACHINE TRANSCRIPTION 4 UNITS
Class hours: 4 lecture/2 lab
Prerequisite: BASS 131 or BASS 61, BASS 162, BCOM 46, and MA 161 or equivalent with grades of Credit or "C" or higher.
Corequisite: None.
Recommendation: Concurrent enrollment in BASS 3T and the ability to type 30 wpm.
This course prepares students in medical transcription common to a medical office. This course helps students to identify correct terminology, spell and define terms, and prepare appropriate forms. Reports are dictated in different accents, dialects, and gender voices, and are typed using appropriate word processing software to simulate real medical office environments. (Formerly BASS 65)

BASS 71
COMPUTERS IN THE MEDICAL OFFICE 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: MA 60, MA 161 and concurrent enrollment in BASS 3T.
This course prepares the medical/dental secretary or medical/dental office personnel to work as front office personnel in a health care practice. Students will learn to input patient information, schedule appointments, handle billing, handle insurance claims, and apply computer basics as they relate to the medical office. (Formerly BASS 67)

BASS 80
PROCESSING LAW OFFICE DOCUMENTS 2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: BASS 108 or BL 57 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: Concurrent enrollment in BASS 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 81
LEGAL OFFICE PROCEDURES 4 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: BASS 131 or equivalent with a grade of Credit or "C" or higher. Ability to type 30 wpm.
Recommendation: Concurrent enrollment in BASS 3T or BASS 36T.
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 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 for the person who has a basic background in the Spanish language and who needs to learn specific field-related terminology and vocabulary for the legal offices that serve Spanish-speaking clients. (Formerly BASS 51)

BASS 83
LEGAL OFFICE TERMINOLOGY / MACHINE TRANSCRIPTION 4 UNITS
Class hours: 4 lecture/2 lab
Prerequisite: BASS 131 or BASS 61, BCOM 46, and BASS 162 or equivalent with grades of Credit or "C" or higher.
Corequisite: None.
Recommendation:Concurrent enrollment in BASS 3T and the ability to type 30 wpm.
This course is designed to teach the student legal terminology in order to be able to transcribe and key legal documents. The student will also learn the skills and knowledge necessary for the production of high-quality legal documents through the total transcription concept and for the development of proper machine dictation skills/procedures. The emphasis is on understanding, defining, and using over 900 terms in the legal context; skillful keyboarding; and accurate proofreading to produce quality, finished legal documents on electronic equipment/microcomputers. (Formerly BASS 64)

BASS 108
WORDPERFECT FOR WINDOWS 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Ability to type 30 wpm and concurrent enrollment in BASS 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).
Transfer Credit: CSU

BASS 110
DESKTOP PUBLISHING—WORDPERFECT FOR WINDOWS 1.5 UNITS
Class hours: 3 lecture/2 lab (9 weeks)
Prerequisite: BASS 108 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: BASS 50 or equivalent with a grade of Credit or "C" or higher and concurrent enrollment in BASS 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, newsletters, reports, manuals, and booklets. The visual appeal of business and personal documents will be enhanced with variable page layouts using standardized type and graphic design techniques along with WordPerfect templates. (This course is intended for the business office professional and not the graphic artist.)(Formerly BASS 10)
Transfer Credit: CSU

BASS 112
MICROSOFT WORD FOR WINDOWS 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite:None.
Recommendation:Ability to type 30 wpm and concurrent enrollment in BASS 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 docu-

ment, cursor movements, inserting and deleting text, margins, tabs, formatting, search, replace, printing, headers and footers, footnotes and hyphenation, spell check, thesaurus, macros, merge, math, outliner, and desktop publishing. (Formerly BASS 12)
Transfer Credit:CSU

BASS 114
INTRODUCTION TO MICROSOFT OFFICE FOR OFFICE PERSONNEL 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Ability to type 30 wpm and concurrent enrollment in BASS 3T.
This course is designed to teach students the application of basic word processing concepts and office skills using IBM compatible computers and the Microsoft Office (Word, Excel, Access, and PowerPoint) to integrate the multi-faceted tasks within the office environment. The word processing concepts and office skills will include the creating, editing, and printing of letters, memos, reports, presentation graphics, overheads, business figure analyses, various miscellaneous office documents, and maintenance/modification of client database. (This course can be taken in either a traditional or an on-line learning environment.)(Formerly BASS 14)
Transfer Credit: CSU

BASS 116
DESKTOP PUBLISHING—WORD FOR WINDOWS 1.5 UNITS
Class hours: 3 lecture/2 lab (9 weeks)
Prerequisite: BASS 112 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: BASS 51 or equivalent with a grade of Credit or "C" or higher.
This course is for students already familiar with word processing. Applications of key concepts develop skills in critical thinking, decision making, and creativity in planning, designing, or evaluating documents. These documents include letterheads, business cards, personal documents, flyers, brochures, promotional documents, charts, transparencies, presentation materials, newsletters, reports, manuals, and booklets. The visual appeal of business and personal documents is enhanced with variable page layouts using standardized type and graphic design techniques along with Word templates. (This course is intended for the business office professional and not the graphic artist.) (Formerly BASS 16)
Transfer Credit: CSU

BASS 120
WORD PROCESSING OFFICE SIMULATION 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite:BASS 108 or BASS 112 or equivalent with a grade of Credit or "C" or higher.
Recommendation: Concurrent enrollment in BASS 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)
Transfer Credit: CSU

BASS 131
BEGINNING TYPING / KEYBOARDING 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Recommendation: Concurrent enrollment in BASS 36T.
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)
Transfer Credit: CSU

BASS 133
INTERMEDIATE TYPING / KEYBOARDING 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: Ability to type 30 wpm; BASS 131 or BASS 61 or equivalent with a grade of Credit or "C" or higher.
Recommendation: Concurrent enrollment in BASS 36T.
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. (Formerly BASS 33)
Transfer Credit: CSU

BASS 134
ADVANCED TYPEWRITING 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: Ability to type 40 wpm; BASS 133 or equivalent with a grade of Credit or "C" or higher.
Recommendation: Concurrent enrollment in BASS 36T.
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)
Transfer Credit: CSU

BASS 135
TYPEWRITING SPEED / CONTROL BUILDING 1 UNIT
Class hours: 2 lecture/1lab (9 weeks)
Prerequisite: Knowledge of keyboard and key strokes.
Recommendation: Concurrent enrollment in BASS 36T.
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)
Transfer Credit: CSU

BASS 155
ADMINISTRATIVE SECRETARIAL PROCEDURES 4 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: BASS 131 or equivalent with a grade of Credit or "C" or higher. Ability to type 30 wpm.
Recommendation: Concurrent enrollment in BASS 3T or BASS 36T.
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)
Transfer Credit: CSU

BASS 161
PRINCIPLES OF FILING 1 UNIT
Class hours: 2 lecture/1 lab (9 weeks)
Prerequisite: None.
Recommendation: Concurrent enrollment in BASS 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 using DOS commands to store and retrieve electronics data to and from directories and subdirectories. (Formerly BASS 61)
Transfer Credit: CSU

BASS 162
BUSINESS SPELLING AND PROOFREADING SKILLS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Concurrent enrollment in BASS 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)
Transfer Credit: CSU

BASS 163
MACHINE TRANSCRIPTION 4 UNITS
Class hours: 4 lecture/2 lab
Prerequisite:BASS 131 or BASS 61, BCOM 46, and BASS 162 or equivalent courses with grades of Credit or "C" or higher. Ability to type 30 wpm.
Recommendation: Concurrent enrollment in BASS 3T.
This is a course designed to teach the skills and knowledge necessary for the production of high-quality business documents through the total transcription concept (from handwritten copy, from machine dictation, or from shorthand dictation) and for the development of proper machine dictation skills/procedures. The emphasis is on the development of language arts skills, skillful keyboarding, and accurate proofreading in producing quality finished documents on electronic equipment/microcomputers. (Formerly BASS 63)
Transfer Credit: CSU

BASS 173/174
BUSINESS ADMINISTRATIVE SUPPORT SYSTEMS OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: 1 hour/week coordination class.
Corequisite: Enrollment in 7 or more units, including Business Administrative Support Systems Occupational Work Experience, in a declared business major. Three units of Business Administrative Support Systems Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester. Four units of Business Administrative Support Systems 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)
Transfer Credit: CSU

BUSINESS COMMUNICATION

(Business Division)

BCOM 1T (Not degree applicable)
INDIVIDUALIZED BUSINESS COMMUNICATIONS SKILLS 0 UNIT
Class hours:3 lab, open entry/open exit (17 weeks)
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 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 equivalents 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 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 151
COMPUTER APPLICATIONS / BUSINESS DOCUMENTS **1 UNIT**
Class hours: 2 lecture/1 lab (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: Concurrent enrollment in one of the following courses:BCOM 45, 147, 148, 150, or 152.
This course reinforces the critical writing skills involved in preparing effective business messages through hands-on experience in using the microcomputer. Students will use primary-computer-applications skills in word processing, spreadsheet, data management, graphics, and desktop publishing to solve communication problems in the production of typical business documents, including letters, memoranda, reports, resumes, and proposals. The applications in this course are carefully designed to correlate with the content coverage of primary business communication texts. (Formerly BCOM 51)
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 COURT REPORTING / COMPUTERIZED SHORTHAND

(Business Division)

BUSC 1T (Not degree applicable)
CAT TUTORIAL LAB **0 UNIT**
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 UNIT**
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-TYPING LAB **0 UNIT**
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 UNIT**
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 UNIT**
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 minimum 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/1lab
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 including vocabulary building with an emphasis on spelling, homophone differentiation, and 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 translation. (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

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 nontechnical dictionary building. Students will be required to have an electronic stenotype machine or purchase a Prowriter attachment for their stenotype machine to create personal dictionaries of approximately 20,000 words. This course may be taken for a maximum of 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, spell checking, formatting, and printing a document. Students use the Prowriter attachment or electronic stenotype machine to continue preparing their personal dictionaries on a disk. This course may be taken for a maximum of 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 stenographic computer-aided medical transcribing career. It provides a systematic approach toward building a basic personal medical dictionary. The dictionary entries include Latin and Greek prefixes, roots, suffixes and combining forms as well as medical terminology that will be created using a computer-aided transcription (CAT) software system. This course may be taken for a maximum of 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 transcribing or court reporting. It provides a systematic approach toward building a basic legal computer-aided transcription (CAT) dictionary. Entries into the CAT dictionary include Latin and Greek prefixes, suffixes, roots, and combining forms of legal terminology used in various aspects of the legal system. This course may be taken for a maximum of 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 equivalents 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 equivalents 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 Bench broaden keying vocabulary. This course may be taken for a maximum of 9 units. (Formerly BUSC 26)
Transfer Credit: CSU

BUSC 127
COMPUTERIZED SHORTHAND REALTIME PRACTICUM III (140-170 WPM) 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: BUSC 119C and BUSC 145 or equivalents 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 develops realtime stenotype techniques and speed through the use of sustained dictation consisting of Congressional Record, literary, jury charge, and multiple-voice testimony. This course may be taken for a maximum of 9 units. (Formerly BUSC 27)
Transfer Credit: CSU

BUSC 128
COMPUTERIZED SHORTHAND REALTIME PRACTICUM IV (160-190 WPM) 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: BUSC 119C and BUSC 146 or equivalents 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 develops realtime stenotype techniques and speed through the use of sustained dictation consisting of Congressional Record, literary, jury charge, and multiple-voice testimony. In addition, this course prepares advanced students for various state and city hearing reporter examinations and employment. This course may be taken for a maximum of 12 units. (Formerly BUSC 28)
Transfer Credit: CSU

BUSC 129
COMPUTERIZED SHORTHAND REALTIME PRACTICUM V (180-210 WPM) 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: BUSC 119C and BUSC 147 or equivalents 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 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 equivalents 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 first semester course covers the basic theory of computer compatible shorthand and mastery of the stenotype keyboard. (Formerly BUSC 40)
Transfer Credit: CSU

BUSC 141
COMPUTERIZED SHORTHAND THEORY REVIEW / SKILL DEVELOPMENT 3 UNITS
Class hours:2 lecture/4 lab
Prerequisite:None.
Corequisite:BUSC 3T, BUSC 4T and BUSC 140.
Recommendation:Minimum typing speed of 35 wpm or enrollment in a typing class.
This course is an intensive review of the basic theory of computer compatible shorthand and is designed for students who have some previous instruction. This course may be taken for a maximum of 6 units. (Formerly BUSC 41)
Transfer Credit: CSU

BUSC 142
INTERMEDIATE COMPUTERIZED SHORTHAND 3 UNITS
Class hours:2 lecture/4 lab
Prerequisite:BUSC 140 and BUSC 141 or equivalent with grades of Credit or "C" or higher. May be taken concurrently with BUSC 141 and BUSC 143.
Corequisite:BUSC 1T, BUSC 2T, BUSC 3T, BUSC 4T, and BUSC 119A.
Recommendation:Minimum typing speed of 40 wpm or enrollment in a typing class.
This course provides basis for developing, refining, and improving machine skill and speed. Emphasis is placed on frequently used words and phrases, word families, number drills, legal terms, literary and business dictation, and two-voice question and answer testimony. This course may be taken for a maximum of 6 units. (Formerly BUSC 42)
Transfer Credit: CSU

BUSC 143
COMPUTERIZED SHORTHAND SPEED BUILDING I 3 UNITS
Class hours:2 lecture/4 lab
Prerequisite:BUSC 142 or equivalent with a grade of Credit or "C" or higher.
May be taken concurrently with BUSC 142 and BUSC 144.
Corequisite:BUSC 1T, BUSC 2T, BUSC 3T, BUSC 4T, and BUSC 119B.
Recommendation:Minimum typing speed of 43 wpm or enrollment in a typing class.
This course provides a continuing basis to further develop, refine, and improve machine shorthand skill and speed. In addition to the areas emphasized in previous classes, jury charge and multiple-voice colloquy are included. This course may be taken for a maximum of 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 119C.
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 44)
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 119D.
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 45)
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. In addition, this course is designed to prepare advanced students for various state and city hearing reporter examinations and employment. This course may be taken for a maximum of 12 units. (Formerly BUSC 47)
Transfer Credit: CSU

BUSC 148
COMPUTERIZED SHORTHAND SPEED BUILDING (180-210 wpm) 3 UNITS
Class hours:2 lecture/4 lab
Prerequisite:BUSC 147 or equivalent with a grade 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 143.
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 or equivalent with a grade of Credit or "C" or higher.
May be taken concurrently with BUSC 148.
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 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 equivalents 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 COLLOQUY 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 formatting techniques in reporting and transcribing multiple-voice colloquy. This course develops proficiency in recording colloquy at speeds ranging from 80-110 wpm. Sustained dictation consists of multiple-voice colloquy, jury charge, and two-voice testimony. This course may be taken for a maximum of 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.
Corequisite: BUSC 2T and BUSC 4T.
Recommendation: Minimum typing speed of 47 wpm.
This short-term, intensive course introduces methodology of reporting and transcribing Congressional Record material and develops punctuation skills, formatting techniques, and stenotype speed for this aspect of reporting. Sustained dictation consists of Congressional Record, jury charge, and two-voice testimony. This course develops proficiency in recording Congressional Record material at speeds ranging from 100-130 wpm. This course may be taken for a maximum of 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.
Corequisite: BUSC 2T and BUSC 4T.
Recommendation: Minimum typing speed of 50 wpm.
This short-term, intensive course further promotes the development of speed, accuracy, and formatting techniques in reporting and transcribing increasingly complex multiple-voice colloquy. This course develops proficiency in recording colloquy at speeds ranging from 120-150 wpm. Sustained dictation consists of multiple-voice colloquy, jury charge, Congressional Record, and two-voice testimony. This course may be taken for a maximum of 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.
Corequisite: BUSC 2T, BUSC 3T, and BUSC 4T.
Recommendation: Minimum typing speed of 55 wpm.
This short-term, intensive course is designed to introduce methodology of reporting jury voir dire and to develop management techniques and stenotype speed for this aspect of reporting. The course develops proficiency in recording jury voir dire proceedings and jury charge at speeds ranging from 150-160 wpm. This course may be taken for a maximum of 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 apprencticeship.
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/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. These courses may be taken for a maximum of 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, along with a mock CSR examination and a mock RPR examination. 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 equivalents 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 90)
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 equivalents with grades of Credit or "C" or higher.
Corequisite: BUSC 143 and BUSC 174 or equivalents.
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 PROCEDURES 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 equivalents 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

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.
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 UNIT
Class hours: 3 lecture (6 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 either a traditional 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 1T (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 BASS 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)

BL 100
INTRODUCTION TO CALIFORNIA CIVIL PROCEDURES 3 UNITS
Class hours: 3 lecture +1 hr. lab. arr.
Prerequisite:None.
Corequisite: BL 56 or prior completion with a grade of Credit or "C" or higher.
This course is an introduction to civil procedures in litigation, including pre-suit claims and notices, jurisdiction, service of process, venue, statutes of limitations, parties, and joinder. Rules governing pleading in complaints and answers are covered, as well as demurrers and amended pleadings. Computerized legal forms are introduced. (Formerly BL 2)
Transfer Credit: CSU

BL 101
INTRODUCTION TO LAW 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is an introduction to careers in the legal field including the role of the paralegal/legal assistant in the law office and the rules of ethics which govern lawyers and legal assistants. The course also covers substantive law in the areas of crimes and torts and describes the structure of the legal system in the federal and state settings. An introduction to the law library and legal resources is provided. (Formerly BL 1)
Transfer Credit: CSU

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 modern legal research which include the use of the law library and the specific techniques of how to use the primary and secondary sources of the law, legal terms, research aids; and introduction to legal writing. Primary emphasis will be on the legal research in the state of California. (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.
Recommendation: BL 56 or equivalent with a grade of Credit or "C" or higher.
This is an advanced legal research course for the paralegal student. This course will utilize legal research skills to develop sophisticated techniques in the use of legal research materials both at the state and federal levels. Computerized legal research (Westlaw) and traditional research methods will be utilized in preparing complex legal research projects. Analysis of the law through practical application of legal research will be developed. Memorandums, points and authorities, and comprehensive briefs will be required. (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 State employment, labor, and workers' compensation laws that affect the relationship between employers and employees in the work place. It provides an understanding for both employers and employees of their rights and obligations under these laws. (Formerly BL 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 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
LAW 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 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 75 paid hours of work per semester.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken for a maximum of 3 units. (Formerly BL 71)
Transfer Credit: CSU

BL 172
BUSINESS PARALEGAL OCCUPATIONAL WORK EXPERIENCE 2 UNITS
Class hours: 1 lecture
Prerequisite: None.
Corequisite: Enrollment in 7 or more units, including Business Paralegal Occupational Work Experience, in a declared business major. Two units of Business Paralegal Occupational Work Experience require 120 non-paid hours of work or 150 paid hours of work per semester.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken for a maximum of 6 units. (Formerly BL 72)
Transfer Credit: CSU

BL 173/174
BUSINESS PARALEGAL OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: 1 hour/week coordination class.
Corequisite: Enrollment in 7 or more units, including Business Paralegal Occupational Work Experience, in a declared business major. Three units of Business Paralegal Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester. Four units of Business Paralegal Occupational Work Experience require 240 non-paid hours of work or 300 paid hours of work per semester.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site.
Second, third, and fourth semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. These courses may be taken for a maximum of 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 facie 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 UNIT
Class hours: 1 lab
Prerequisite: None.
Corequisite: BUSR 50.
Recommendation: None.
This course develops proficiency in computer applications in Business Real Estate. Students must attend one hour minimum per week and are limited to a maximum of three hours per week. (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 manipulation 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 taxations, 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 licenses. (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. Great emphasis is placed on preparing the student to be able to walk into an appraisal office and begin appraising. Capitalization, reciprocals, Inwood Methods, land and building residual techniques, and Hoskold Theories are covered. (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, prorations 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 classification, 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 additionally approved for 45 hours of continuing education for real estate licenses, 51 hours of continuing education for certified and licensed Appraisers or 54 hours of basic education for real estate appraisers. Course may be taken as a broker's license requirement. (Formerly BUSR 40)
Transfer Credit: CSU

BUSR 151
FUNDAMENTALS OF ESCROW 3 UNITS
Class hours:3 lecture
Prerequisite:BUSR 101 or equivalent with a grade of Credit or "C" or higher.
This is a basic course covering the principles and fundamentals of escrow procedure, with emphasis on the duties and responsibilities of escrow personnel. Attention is given to the value of an escrow as a means of facilitating the transfer of property and for protection of the interests of the principals. This is a background course for real estate students and a prerequisite for more advanced courses in escrow. Course may be taken as a broker's license requirement. (Formerly BUSR 51)
Transfer Credit: CSU

BUSR 160
REAL ESTATE ECONOMICS 3 UNITS
Class hours:3 lecture
Prerequisite:BUSR 101 or equivalent with a grade of Credit or "C" or higher.
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 Credit or "C" or higher.
Corequisite: Enrollment in 7 or more units, including Business Real Estate Occupational Work Experience/Career Internship, in a declared business major. Two units of Business Real Estate Occupational Work Experience/Career Internship require 120 non-paid hours of work or 150 paid hours of work per semester.
Recommendation: None.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to exacting experiences in the workplace. The aim of the course is to assist students in becoming more productive workers. In the process of doing so, it creates greater communication with increased understanding between the broker/sponsors, student/trainees, and the college. First-semester students meet with their instructors for a minimum of one hour per week. Students also pursue a
program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Second-, third-, and fourth-semester students must meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken 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 Credit or "C" or higher.
Corequisite:Enrollment in 7 or more units, including Business Real Estate Occupational Work Experience, in a declared business major. Three units of Business Real Estate Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester. Four units of Business Real Estate Occupational Work Experience require 240 non-paid hours of work or 300 paid hours of work per semester.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to exacting experiences in the workplace. The aim of the course is to assist students in becoming more productive workers. In the process of doing so, it creates greater communication with increased understanding between the broker/sponsors, student/trainees and the college.
First-semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site.
Second, third, and fourth semester students must meet weekly with the instructor until their participatory assignments and

semester work projects have been approved. These courses may be taken for a maximum of 15-16 units. (Formerly BUSR 73/74)
Transfer Credit: CSU

CHEMISTRY

(Science / Engineering / Math Division)

CHEM 9T (Not degree applicable)
CHEMISTRY-TUTORIAL 0 UNIT
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 (CAN CHEM 6)
INTRODUCTORY CHEMISTRY 4 UNITS
Class hours: 3 lecture/2 lab/1 quiz
Prerequisite: MATH 40 or equivalent with a grade of Credit or "C" or higher or satisfactory completion of Math Placement Process.
Recommendation: It is strongly recommended that the preceding prerequisite be completed within four years prior to the date of enrollment in CHEM 100.
This course is an introduction to the basic principles of inorganic and organic chemistry and biochemistry with their application to problems encountered in our everyday lives. The course includes the metric system, atomic structure, bonding, solutions, chemical reactions, hydrocarbons, functional groups, carbohydrates, lipids, and proteins. It is designed to give a general introduction to fundamental concepts and to prepare students for majors in nursing, dental hygiene, physician assistant, physical therapy assistant, liberal arts, and technical fields. (Not open to those with credit in more advanced courses.)(Formerly CHEM 10)
Transfer Credit: CSU; UC

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). All of the preceding prerequisites must be completed within five years prior to the date of enrollment in CHEM 111.
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 (CAN CHEM 12)
QUANTITATIVE ANALYSIS
CHEMISTRY 4 UNITS
Class hours: 2 lecture/2 quiz/4 lab
Prerequisite: CHEM 112 or equivalent with a grade of Credit or "C" or higher.
Recommendation: It is strongly recommended that the preceding prerequisite be completed within four years prior to the date of enrollment in CHEM 205.
This course is an introduction to theories and techniques of gravimetric, volumetric, colorimetric, and electro-analytic methods of analysis. The course is designed for majors in chemistry, engineering, medicine, dentistry, pharmacy, and laboratory technology. (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 (211-F; 212-S)
Prerequisite: CHEM 112 or equivalent with a grade of Credit or "C" or higher.
Recommendation: It is strongly recommended that the preceding prerequisites be completed within four years prior to the date of enrollment in CHEM 211-212.
A year course in the properties and reactions of aliphatic and aromatic organic compounds with emphasis being placed on reaction mechanisms, fundamental principles and modern instrumental methods. The Laboratory will stress synthesis, techniques, and spectroscopic and qualitative analysis. (Formerly CHEM 7. 1-7. 2)
Transfer Credit: CSU; UC

CHEM 250L
SPECIAL TOPICS IN CHEMISTRY 1 UNIT
Class hours: 3 lab
Prerequisite: CHEM 111 or equivalent with a grade of Credit or "C" or higher.
This course is primarily for chemistry or related science majors. Individual research problems are explored using materials, equipment and techniques not available to larger classes. This course may be taken 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

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 equivalents 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 equivalents 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)

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 experientially 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 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 173/174
EARLY CHILDHOOD EDUCATION OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Early Childhood Education work experience 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.
Prerequisite: None.
Corequisite: Enrollment in Child Development vocational program of 7 or more units in major including Occupational Work Experience.
Occupational Work Experience is a supervised employment program in an approved work station related to the student's declared major. Students meet with their instructor for a minimum of one hour per week and will receive credit for on-the-job learning 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. This course meets the Department of Social Service Classification Indicator DS 3. (Formerly CDEC 73/74)
Transfer Credit: CSU

CDEC 230
ADULT SUPERVISION IN CHILD CARE PROGRAMS 3 UNITS
Class hours: 3 lecture
Prerequisite: CD 110, CDEC 111, CDEC 112, and CDEC 113 or equivalents with grades of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course is a study of the methods and principles of supervising student teachers, assistant teachers, parents and volunteers in early childhood education/child development classrooms. Emphasis is on the role of the classroom teachers who function as mentors to new teachers while simultaneously addressing the needs of children, parents, and other staff. This course meets the requirement for a course in adult supervision for the California Child Development Permit. (Formerly CDEC 52)
Transfer Credit: CSU

CHILD DEVELOPMENT / FAMILY CHILD CARE

(Health Occupations Division)

CDFC 10 (Not degree applicable)
FAMILY CHILD CARE PROVIDERS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed for a person interested in or already managing a child care business in the home. Licensing procedures, appropriate standards, recruitment of children, cultural issues, provision and maintenance of a safe and stimulating environment, nutrition programs, community resources, record keeping and other business aspects are covered. Emphasis is on nurturing children, working cooperatively with parents, and the importance of a good self-concept for the child and the family child care provider.

CHILD DEVELOPMENT / INSTRUCTIONAL AIDE

(Health Occupations Division)

CDIA 73/74
INSTRUCTIONAL AIDE OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Instructional Aide work experience 73 or 20 hours of employment per week for Instructional Aide work experience 74. The employment must be in a job related to the student's educational goal.
Corequisite: Enrollment in the Instructional Aide vocational program with 7 or more units including occupational work experience.
Occupational Work Experience is a supervised employment program in an approved work station related to the student's declared major. Students meet with their instructor for a minimum of one hour per week and will receive credit for on-the-job learning experiences that are new or are an expansion of their regular responsibilities. Students who are not employed but wish to gain work experience may be placed in a non-paying position if such opportunities are available. These courses may be taken for a maximum of 6-8 units based on the number of hours on the job.

CDIA 90
INTRODUCTION TO ELEMENTARY AND SECONDARY CLASSROOM EXPERIENCES 3 UNITS
Class hours:3 lecture
Prerequisite:None.
This course is designed to introduce students to principles of classroom experiences. In addition to the dynamics of grade level instruction, emphasis is placed on how children learn, the curriculum of the classroom, and the role of the paraprofessional or volunteer within a school setting. Attention will be placed on bilingual and multicultural instruction. (Formerly CDIA 10)

CDIA 91
THE CHILD IN THE ELEMENTARY AND SECONDARY SCHOOL ENVIRONMENT 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course examines various approaches to learning and their direct classroom applications:behavioral approaches to classroom management; cognitive psychology to specific curriculum designs; and motivation to humanizing the classroom. Individualization of instruction for children with special needs—bilingual, learning disabilities, and gifted—is emphasized. (Formerly CDIA 20)

CDIA 99
INSTRUCTIONAL AIDE PRACTICUM 3 UNITS
Class hours:1 lecture/6 lab
Prerequisite:None.
This course offers the student the opportunity to work as an instructional aide under the supervision of professional staff in an elementary or secondary school setting. Content will include developing skills, techniques, and strategies for working in the multilingual/multiethnic classroom. Classroom placement will be arranged for those students not employed by a school district. This course may be taken for a maximum of 6 units. (Formerly CDIA 35)

CHILD DEVELOPMENT / INFANT TODDLER

(Health Occupations Division)

CDIT 50
INFANT/TODDLER CARE GIVING 3 UNITS
Class hours: 3 lecture
Prerequisite: CD 110 or equivalent with a grade of Credit or "C" or higher.
The principles of a sound infant/toddler care program are explored. The course content includes roles of the director, teacher and aide, laws and regulations, and considerations relating to learning objectives, developmental needs and other key factors. This course meets the Department of Social Service Classification Indicator DS 4. (Formerly CDIT 10)

CHILD DEVELOPMENT / SCHOOL AGE

(Health Occupations)

CDSA 152
SCHOOL-AGE CHILD CARE SUPERVISION AND ADMINISTRATION 3 UNITS
Class hours: 3 lecture
Prerequisite: CD 110 or equivalent with a grade of Credit or "C" or higher.
This course presents the principles of administration and supervision of school-age child care programs. Emphasized are the role of the director, teacher, and aide; laws and regulations; and a study of objectives, curricula, developmental needs, and other key factors for operating such programs. The unique features of before-and-after-school care as opposed to the regular school day will be stressed. This course meets the Department of Social Service Classification Indicator DS 6. (Formerly CDSA 10)
Transfer Credit: CSU

CDSA 155
SCHOOL-AGE CHILD CARE ACTIVITIES 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course presents activities for the 6-12 year-old child in an extended day care setting. Focus is on cognitive, physical, psychosocial, and creative aspects of development, as well as positive approaches to guidance. This course meets the Department of Social Service Classification Indicator DS 5. (Formerly CDSA 20)
Transfer Credit: CSU

CDSA 259
SCHOOL-AGE CHILD CARE PRACTICUM 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: CDSA 155 or equivalent with a grade of Credit or "C" or higher.
This course provides practical experiences in an extended 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 class 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 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.

COMPUTER AND INFORMATION SCIENCES

(Science, Engineering and Math Division)

CIS 2T (Not degree applicable)
AS/400 TUTORIAL LAB 0 UNIT
Class hours: 2 hrs. arr. (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
Students must attend two hours minimum per week and are limited to a maximum of six hours per week multiplied by the number of AS/400 courses in which the students are enrolled. (Formerly BCIS 23. 3)

CIS 3L (Not degree applicable)
COMPUTER UTILIZATION 0 UNIT
Class hours: 1 hour per week as arranged.
Students must attend one hour minimum per week and are limited to a maximum of three hours per week multiplied by the number of data processing courses in which the students are enrolled that require this lab. (Formerly BCIS 77)

CIS 5A (Not degree applicable)
BUSINESS COMPUTER INFORMATION SYSTEMS WORD PROCESSING 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 word processing 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. 1)

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. 3)

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. The modules will also include the basic concepts and use of Powerpoint, a presentation application, and a basic introduction to the Internet and creating Web Pages. This course may be taken for a maximum of 1. 0 unit. (Not open to students with credit in CIS 102 (Formerly BCIS 15/BCIS 15. 4)

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 1)

CIS 51
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)

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 arecovered. 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 covered. The database functions of Excel will include:sorting, filtering, queries, macros, and record retrieval. Hands-on exercises will be used to reinforce the functions of Excel. (Formerly BCIS 11. 2)

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 equivalents 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 equivalents 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, trouble-shoot, 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 179 or equivalents 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 179 and CIS 205 or equivalents 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 equivalents 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 (CAN BUS 6)
INTRODUCTION TO BUSINESS 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 business 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 5 and in
programming using QuickBASIC 4.5. Students will have access to campus computer labs. (Formerly BCIS 40)
Transfer Credit: CSU

CIS 102
INTRODUCTION TO MICROCOMPUTERS USING MICROSOFT OFFICE 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite:None.
This course instructs the students in the use of microcomputers within the business environment using the Microsoft Windows interface and the Microsoft Office Professional application suite (Word, Excel, Access, and PowerPoint). Students learn basic aspects of microcomputer hardware and 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 anintroductory 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; UC

CIS 105
WINDOWS 95 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 Windows 95. Topics include file and application management, personalizing the system, using the productivity tools, connecting to Internet, and exchanging data. Current topics of interest relating to Windows 95 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 create Web pages with FrontPage. The Web designing projects provide a practical application of Web developments with a real world environment. (Formerly BCIS 76)
Transfer Credit: CSU

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 Webs, 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 equivalents 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 operation 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 frame-

work upon which programming skills will be built. Students will have "hands-on" access to business oriented microcomputer systems in a lab setting. Lab problems will be assigned and coded in Microsoft BASIC. Implementation of other languages on microcomputers will also be discussed. (Formerly BCIS 16)
Transfer Credit: CSU; UC

CIS 171
BUSINESS COMPUTER INFORMATION SYSTEMS OCCUPATION WORK EXPERIENCE 1 UNIT
Class hours: 1 hr/wk coordination class
Prerequisite: None.
Corequisite: Enrollment in 7 or more units, including Business Computer Information Systems Occupational Work Experience or at least one other course during summer, in a computer-related major. One unit of Business Computer Information Systems 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. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First-semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Second-, third-, and fourth-semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This may be taken for a maximum of 3 units. (Formerly BCIS 72. 1)
Transfer Credit: CSU

CIS 172
BUSINESS COMPUTER INFORMATION SYSTEMS OCCUPATION WORK EXPERIENCE 2 UNITS
Class hours: 1 hr/wk coordination class
Prerequisite: None.
Corequisite: Enrollment in 7 or more units, including Business Computer Information Systems Occupational Work Experience or at least one other course during summer, in a computer-related major. Two units of Business Computer Information Systems Occupational Work Experience requires 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 172)
Transfer Credit: CSU

CIS 173/174
BUSINESS COMPUTER INFORMATION SYSTEMS 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 and 10-25 hours per week on the job/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 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 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 abasic 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. (Formerly BCIS 57)
Transfer Credit: CSU

CIS 176
COBOL PROGRAMMING 3 UNITS
Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: CIS 103 or equivalent with a grade of Credit or "C" or higher.
Corequisite:None.
This is an introductory course in computer programming, utilizing the most frequently used procedural language for business applications—COBOL. COBOL is a "near English" language which provides for thorough documentation of the program, and enables programmers to program on all major manufacturers' equipment with minimum of adjustment. The purpose, structure, content and specific rules of the language will be considered in detail. Business applications will be analyzed, flowcharted, coded and debugged using the computer. Structured programming concepts will be introduced. COBOL lab problems will be assigned. (Formerly BCIS 58)
Transfer Credit: CSU; UC

CIS 177 (CAN CSCI 12)
PROGRAMMING IN PASCAL 4 UNITS
Class hours:3 lecture/3 lab
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" of 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 (CAN CSCI 4)
PROGRAMMING IN FORTRAN 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: MATH 140 or equivalent with a grade of Credit or "C" or higher and satisfactory score on the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher.
This is an introductory level programming course using the Fortran programming language. Emphasis is placed on engineering and mathematics applications. Topics include input/output techniques, declaration statements, data types, branching, looping, arrays, subroutines, functions, passing parameters, sorting and searching. (Formerly CPSC 80)
Transfer Credit: CSU; UC

CIS 179
VISUAL BASIC PROGRAMMING 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 105 and CIS 170 or equivalents 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)
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 communications 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.
This course covers the fundamentals of the HTML (Hypetext 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: CIS 105 or equivalent with a grade of Credit or "C" or higher.
This course covers the concepts of designing, creating, and accessing Relational Data Base Management Systems using Structured Query Language (SQL). The database programming is based on Microsoft SQL. (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 56 or equivalent with a grade of Credit or "C" or higher is strongly recommended.
This course provides a study of various architectures, topologies, and protocols which combine to create local area networks (LANs), and the Novell Netware Operating System which controls network functionality. The students will learn workstation and file server utilities, installation of applications, attachment of peripherals, customization of the network, troubleshooting techniques, and network connections. (Formerly BCIS 80)
Transfer Credit: CSU

CIS 212
MICROSOFT WINDOWS NT 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 56 and CIS 105 or equivalents with grades of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This is a course for system administrators who are responsible for installing and administrating networks based on Windows NT. The student will learn how to install, configure, and optimize Windows NT, including network architecture, managing and sharing resources, network inter-operability and trouble shooting. (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 equivalents 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 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 39)
Transfer Credit: CSU

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, data 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 179 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course familiarizes the students with client/server database programming, OLE (Object Linking and Embedding), DDE (Dynamic Data Exchange), API (Application Programming Interface), ActiveX controls, multimedia, and object-oriented programming design. The students develop practical business applications. (Formerly BCIS 88)
Transfer Credit: CSU

CIS 222
ADVANCED RPG PROGRAMMING 3.5 UNITS
Class hours: 3 lecture/1.5 lab
Prerequisite: CIS 175 or equivalent with a grade of Credit or "C" or higher.
Corequisite:None.
This is asecond 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 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 179 or CIS 180and CIS 105 or equivalents 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 280
OBJECT-ORIENTED PROGRAMMING IN C++ **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 is a course in Object-Oriented Programming (OOP) using the C++ programming language. Topics presented include abstract data types, objects and classes, operator overloading, inheritance, constructors and destructors, pointers, member functions, virtual functions, the theory of object-oriented programming, and the techniques of object-oriented design. (Formerly BCIS 90)
Transfer Credit: CSU; UC

CIS 282
ADVANCED JAVA PROGRAMMING **3.5 UNITS**
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Strongly recommend CIS 182 or equivalent with a grade of Credit or "C" or higher.
This course covers the JAVA Abstract Window Toolkit (AWT). Topics will include graphical user interface, graphics, multimedia, system management, networking, security, and database connectivity. (Formerly BCIS 93)
Transfer Credit: CSU

CIS 284
CGI AND PERL PROGRAMMING **3.5 UNITS**
Class hours: 3 lecture/2 lab
Prerequisite: CIS 180 and CIS 205 or equivalents with grades of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course covers the Common Gateway Interface (CGI) and Perl programming. Students learn how CGI works and how to write CGI Perl scripts to generate dynamic Web pages, process forms, search information, and provide informative responses. This course is not open to students who have already taken BCIS 94. (Formerly BCIS 79)
Transfer Credit: CSU

CIS 292
DATA STRUCTURES **4 UNITS**
Class hours: 3 lecture/3 lab
Prerequisite:CIS 177 or equivalent with a grade of Credit or "C" or higher.
Corequisite:MATH 101.
This course is designed for students in computer science to cover elementary data structures and advanced programming techniques using Pascal. Topics include arrays, stacks, queues, linked lists, trees, recursion, sorting, searching, and advanced applications. (Formerly CPSC 89)
Transfer Credit: CSU; UC

COMPUTERS IN BUSINESS

SEE CIS
(Computer and Information Sciences)

COSMETOLOGY

(Technology Division)

COS 1 (Not degree applicable)
COSMETOLOGY SALON PREPARATION **1 UNIT**
Class hours: 56 semester lab hours(9 weeks)
Prerequisite: COS 50 or COS 60A and COS 60B or equivalent with grades of Credit or "C" or higher.
Corequisite: Enrollment in any one of the following:COS 51, 52, 61A, 61B, 62A or 62B.
This course is designed to permit the student to complete 1600 hours necessary to take the State Board of Cosmetology examination. It provides an opportunity for the student to continue developing manipulative skills in hair styling, hair coloring, permanent waving, chemical straightening, scalp treatments, facials, waxing, manicuring, pedicures, and thermal styling. This course may be taken for a maximum of 4 units. (Formerly COS 50)

COS 50
INTRODUCTORY COSMETOLOGY1 **9.5 UNITS**
Class hours: 9. 75 lecture/29. 25 lab
Prerequisite: None.
Limitation on enrollment: Completion of 10th grade or equivalent.
Corequisite: None.
Recommenation: 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, hairsculpturing, 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, hairsculpturing, salesmanship, long hair-

styling, chemical relaxing, makeup, conditioning, manicuring, and to gain a knowledge of tricology, 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, hairsculpturing, 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 students' 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, hairsculpturing, haircoloring, permanent waving, and manicuring. Emphasis will be placed on the Cosmetology Act, State Board Rules and Regulations, safety, sanitation, anatomy, and chemistry as they relate to the cosmetology profession. (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, hairsculpturing, haircoloring, permanent waving, manicuring, and pedicuring. Emphasis will be placed on the safety and sanitation as it relates to the cosmetology profession, professionalism and client relationships. (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, hairsculpturing, salesmanship, long hairstyling, chemical relaxing, make-up, conditioning, manicuring, and to gain knowledge of tricology, 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 people skills, manipulative skills in haircolor, manicuring, scalp treatments, chemical waxing, hairsculpturing, and chemistry, hairdesign, permanent wave, press and curl, and chemical relaxing. Emphasis is placed on professionalism, client relationships, and people skills. (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 45)

COS 62B
ADVANCED COSMETOLOGY II 10 UNITS
Class hours: 5 lecture/15 lab
Prerequisite:COS 62A 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 (Summer only)
INTRODUCTORY COSMETOLOGY 8 UNITS
Class hours: 9. 38 lecture/28. 13 lab
Prerequisite: None. (8 weeks)
Limitation on enrollment: 10th grade education or equivalent.
Corequisite: None.
Recommendation: None.
This is an introductory course in the technical and related theory and manipulative skills pertaining to the field of cosmetology. It 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 (Summer only)
INTERMEDIATE COSMETOLOGY 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 consider developing manipulative skills in hair coloring, thermal hairstyling, chemical waving, chemical straightening, facials, make-up, manicuring. Emphasis is placed on professionalism and personal/ client relationships. (Formerly COS 15. 2)

COS 70C (Summer only)
ADVANCED COSMETOLOGY MANIPULATION 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 skill in haircoloring, thermal hairstyling, competition styling, hairsculpturing, conditioning, reconstruction, chemical waving, chemical straightening, facials, make-up, and manicuring. Emphasis is placed on professionalism, client relationships and State Board examination preparation. This course may be taken for a maximum of 16 units as necessary to complete 1600 hours. (Formerly COS 15. 3)

COS 71A (Summer only)
INTRODUCTORY COSMETOLOGY 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 the technical and related theory and manipulative skills pertaining to the field of cosmetology. It provides an opportunity for the student to perform basic skills in chemical relaxer, soft perms, press and curl, facials, and people skills. Emphasis will be placed on the safety and sanitation as it relates to the cosmetology profession. (Formerly COS 23. 1)

COS 71B (Summer only)
INTERMEDIATE COSMETOLOGY 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 hair coloring, thermal hairstyling, chemical waving, chemical straightening, facials, make-up, manicuring. Emphasis is placed on professionalism and personal/ client relationships. (Formerly COS 23. 2)

COS 71C (Summer only)
ADVANCED COSMETOLOGY I 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 waxing, 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 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, midlife career changes, and minority programs. (Formerly CG 2)

CG 2 (Not degree applicable)
SELF AWARENESS TOWARDS EDUCATIONAL READINESS 2 UNITS
Class hours: 6 lecture/10 lab(Summer only) (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. Thisclass 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 enhancehis/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 system of post-secondary education system in California; policies and procedures which affect students at Cerritos College; educational planning, including major and general education requirements, course sequencing, and transfer requirements for the California State University and University of California systems. As part of the course, students will tour the Cerritos College campus, acquainting themselves with the location and function of various offices and service providers. Each student will produce an educational plan specific to her or his educational goal. This course is offered on a credit/no credit basis only. (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)

CULINARY ARTS

(Health Occupations Division)

CA 15
CERTIFICATION FOR FOOD HANDLERS **0.5 UNIT**
Class hours: 3 lecture (3 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course covers the principles of food handling. It is a National Restaurant Association ServSafe course and meets current requirements established by regulatory agencies for a certified food handler. This course is offered on a credit/no credit basis only. (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 73 or 20 hours of employment per week for Culinary Arts work experience 74. 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.
Recommendation: CA 15 or CA 101 or equivalent with a grade of Credit or "C" or higher.
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 emphasized. (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/20 lab
Prerequisite: CA 52 and CA 101 or equivalent with grades of Credit or "C" or higher.
This is a basic course in fundamentals of hotel and restaurant dinner cooking and methods of preparing special pantry items. Lecture/demonstrations and practical experience in varied methods of cooking techniques are an essential part of this course. (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 SKILLS4 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, roll varieties, pie dough and fillings, cakes, 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 practical experiences in the preparation and use of doughs, pastries and creams, adjusting standard recipes, and interpretive use of weights and measures are included. A negative T. B. test for food service personnel is a State regulation. (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.
Corequisite: CA 85
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 agents. (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 non-reactive T. B. skin test or negative chest x-ray within the last year. 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 Assistant 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 II. It is extended to allow for weekly discussions pertinent to clinical skills and related subjects which can be applied in the dental clinic setting. An overview of the technique and procedures particular to each dental specialty is presented. Dental clinic policies and procedures for clinic operation will be emphasized. (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 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 232L
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-base problem simulations. In addition, the subject of myofuncitonal 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 multiculturally diverse community settings. With supervision from the Cerritos College Dental Hygiene faculty, the student will perform traditional dental hygiene functions to a greater number of patients with increased efficiency and complexity and will provide services in a geriatric nursing home. (Formerly DH 45)
Transfer Credit: CSU

DH 248L
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).

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).

DS 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

DS 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

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 51
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.

DRAF 55
AUTOCAD RENDERING AND SOLID MODELING APPLICATIONS 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: DRAF 254 or equivalent with a grade 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 69. 11)

DRAF 56
INTRODUCTION TO AUTOCAD MECHANICAL DESKTOP 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: DRAF 153 and DRAF 254 or equivalents with grades of Credit or "C" or higher, or appropriate work experience.
Corequisite: None.
Recommendation: MTT 100 and MFGT 100 or equivalents 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.

DRAF 57
ADVANCED APPLICATIONS OF AUTOCAD MECHANICAL DESKTOP 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: DRAF 56 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.

DRAF 117
GEOMETRICAL DIMENSIONING AND TOLERANCING 2 UNITS
Class hours: 2 lecture
Prerequisite: DRAF 131 or equivalent with a grade of Credit or "C" or higher .
This is a basic course in datums, modifiers, form tolerancing, positional tolerance, and coordinate tolerance conversion. It will introduce students to the state of the art in dimensioning and tolerancing used in industry. (Formerly DRAF 17)
Transfer Credit: CSU

DRAF 131
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 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 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 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 254
AUTOCAD SOLID MODELING AND 3D 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: DRAF 51 and DRAF 153 or equivalent with grades of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course will assist students in creating three dimensional surface modeling and solid modeling. They will utilize the AutoCAD system for use of symbol libraries, menu development, and general applications in the students' particular fields. (Formerly DRAF 69. 9/DRAF 54)
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, operation 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 relative to hydrologic, oceanographic and atmospheric processes as they affect and are affected by man's activities. The technologic, economic, and political aspects of pollution and solutions to environmental problems are studied. (Formerly ESCI 1)
Transfer Credit: CSU; UC

ESCI 101L
PHYSICAL ECOLOGY FIELD LABORATORY 1 UNIT
Class hours: 3 lab
Prerequisite: Concurrent enrollment in ESC I01 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 environ-

mental 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 sea water. The ecology of the sea and its effect on 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 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 201 (CAN ECON 2)
PRINCIPLES **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 **3 UNITS**
Class hours: 3 lecture
Prerequisite: ECON 201 and MATH 80 or MATH 80B 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

EDUCATIONAL TECHNOLOGY

(Technology Training and Distance Education Division)

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 3 (Not degree applicable)
INTEGRATION OF THE INTERNET TO THE CURRICULUM PART 1 - INTRODUCTION 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 is offered on a credit/no credit basis only. This course may be taken for a maximum of 4 units. (Formerly EDT 11. 1/EDT 54)

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)

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 7
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 61)

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 outliner 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: EDT 9 or equivalent with a grade of Credit or "C" or higher.
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 trains educators and prospective educators in the use of electronic spread-

sheets 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 databse 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 functions of Microsoft Publisher software with an emphasis on the educational community. Microsoft Publisher will be used to create camera-ready printed presentation materials. The course will be used to create fundamentals required to develop presentation material 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, audiographics, 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, audiographics, 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 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)

ELECTRONICS

(Technology Division)

EL 37L (Not degree applicable)
SERVICE AND REPAIR LAB 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 audio radio, television and video systems. 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: (1) Enrollment in the Electronics vocational program with 7 or more units including occupational work experience.
Work experience/career internship provides the opportunity for Electronics students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to the major and job skills must be completed on the job/training site. These courses may be taken for a maximum of 15-16 units. (Formerly EL 73/74)

EL 50
ELECTRONIC TESTS AND MEASUREMENTS 1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: EL 100 or equivalent with a grade of Credit or "C" or higher.
This is a course in the use of electronic testing equipment. Topics include measurement theory, techniques, limitations of test equipment, and interpretation of test results. This course may be repeated for a maximum of 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 114 or equivalent with a grade of Credit or "C" or higher,or appropriate work experience.
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 of "C" or higher, or appropriate work experience.
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 communi-

cation techniques, analog signal conversion, and embedded control. This course may be taken for a maximum of 6 units. (Formerly EL 44.2)

EL 54
MICROCOMPUTER REPAIR FUNDAMENTALS **3 UNITS**
Class hours: 2 lecture/3 lab
Prerequisites: EL 134 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This is a course 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. 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, or appropriate work experience.
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)

EL 62
OPTOELECTRONICS **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, 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 64A
FUNDAMENTALS OF TELECOMMUNICATION ELECTRONICS **3 UNITS**
Class hours: 3 lecture/1 lab
Prerequisite: EL 114 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Corequisite: None.
Recommendation: EL 120 and EL 124 or equivalent with grades of Credit or "C" or higher.
This is an introductory course about the field of telecommunications. Course content includes a presentation of the applied aspects of telephone systems, transmission media, multiplexing techniques, circuit switching, error detection, error correction, and circuit testing. (Formerly EL 64. 1)

EL 64B
ADVANCED TELECOMMUNICATION ELECTRONICS **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.
Recommendation: None.
This is an advanced course in electronic data communications. The material to be covered includes the open system interconnection (OSI) model, the transport control protocol/internet protocol (TCP/IP), integrated services digital network (ISDN), and broadband ISDN. (Formerly EL 64. 2)

EL 66
FUNDAMENTALS OF ELECTRICITY **3 UNITS**
Class hours: 3 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: EL 100 and TM 50 or equivalents with grades of Credit or "C" or higher.
This course introduces the student to the principles of electrical power. Topics to be discussed include electrical safety, generators, motors, wiring, National Electrical Code (NEC), installation, and maintenance. (Formerly EL 19)

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.
Recommendation: None.
This 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.
Recommendation: 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.
Recommendation: EL 210 or equivalent with a grade of Credit or "C"or higher.
This course introduces the student to the concepts of digital signal processing (DSP). Topics to be covered include DSP chip architecture, interfacing, programming, digital filtering, voice recognition, and telecommunications applications. Laboratory experiments will demonstrate the application of DSP devices.

EL 96A
INTRODUCTION TO AUTOMATED MANUFACTURING (ROBOTICS) 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisites: EL 134 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course provides an overview of the current robotics industry starting with a brief history which is followed by a review of the basic terms used in the field. The robots are classified by geometry, power source, application, path control and intelligence. The operation of different types of end effectors is covered along with robot controllers and the basic system sensors. Basic programming techniques are covered. (Formerly EL 55)

EL 96B
AUTOMATED MANUFACTURING (ADVANCED ROBOTICS) 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: EL 96A or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course is designed to prepare technicians in robotics design and research, robot applications, installations, programming, "start-up" procedures, customer service, troubleshooting and maintenance. The technician will have an understanding in integrated systems. The course covers the operation of work cells including vision systems, tactile sensing, offline programming, interfacing to external computers, and voice input and output. Use of vision and touch sensing will be emphasized. (Formerly EL 56)

EL 100
BASIC ELECTRONICS 4 UNITS
Class hours: 4 lecture
Prerequisite: None.
This is a survey course intended for non-electronics majors. It satisfies the general requirements in electronics for Industrial Arts Teacher Training at state universities. It is also an acceptable substitute for the electronics background required as a prerequisite to enter the electronics program. The course will cover both 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 110L
DC ELECTRONICS LABORATORY 1 UNIT
Class hours: 3 lab
Prerequisite: EL 110 or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
Corequisite: None.
Recommendation: None.
Experiments performed in this course are planned to accompany the lectures in EL 10. The student learns to use instrumentation in the measurement and analysis of DC circuits. Color code, symbols, schematics and assembly techniques are introduced. (Formerly EL 10. 1)
Transfer Credit: CSU

EL 114
FUNDAMENTALS OF DIGITAL ELECTRONICS 3 UNITS
Class hours: 3 lecture
Prerequisite:None.
Corequisite:None.
Recommendation:EL 100 or equivalent with a grade of Credit or "C" or higher and satisfactory completion of the Math Placement Process or MATH 20 or equivalent with a grade of Credit or "C" or higher.
This course is an introduction to the fundamentals of digital electronics. The material includes number systems, Boolean algebra, logic symbols, computer codes, combinational logic circuits, and programmable logic devices. (Formerly EL 14)
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 or concurrent enrollment.
Corequisite: None.
Recommendation: None.
Experiments performed in this course are planned to accompany the lectures in EL 120 (Principles of AC Electronics). The student learns to use electronic laboratory instruments in the measurement and analysis of AC circuits. (Formerly EL 20. 1)
Transfer Credit: CSU

EL 124
ADVANCED DIGITAL ELECTRONICS 3 UNITS
Class hours: 3 lecture
Prerequisite: EL 114 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course is a continuation of the principles learned in EL 114. The material includes flip-flops, multivibrator circuits, sequential logic circuits, memory systems interfacing, and an introduction to microprocessors. (Formerly EL 24)
Transfer Credit: CSU

EL 124L
ADVANCED DIGITAL ELECTRONICS LABORATORY 1 UNIT
Class hours: 3 lab
Prerequisite: EL 114L or equivalent with a grade of Credit or "C" or higher.
Corequisite: EL 124 or equivalent.
Recommendation: None.
This is a laboratory course designed to support the concepts learned in EL 124. Experiments are used to verify the applications of flip-flops, multivibrator circuits, sequential logic circuits, memory systems, interfacing, and microprocessors. Design projects are assigned to be constructed using integrated circuits and computer simulations. (Formerly EL 24. 1)
Transfer Credit: CSU

EL 134
DIGITAL CIRCUITS AND COMPUTER LOGIC 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: EL 100, TM 54 or equivalent with grades of Credit or "C" or higher.
This course is an introduction to the fundamentals of digital electronics. The material includes Boolean algebra, combination and sequential logic circuits, and an introduction to memory systems. TTL integrated circuits are used in the laboratory to implement student designed projects. (Formerly EL 34)
Transfer Credit: CSU

EL 200
SEMI-CONDUCTOR CIRCUITS 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 . This course covers the theory of operation of semiconductor devices and development and analysis of the basic circuits employed in analog electronic systems. (Formerly EL 30)
Transfer Credit: CSU

EL 200L
SEMI-CONDUCTOR CIRCUITS 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 30.1)
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, or appropriate work experience.
Theory of superheterodyne receivers and practice in servicing of electronic circuits with special emphasis on commercial radio and television receivers will be explored. (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.
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

EL 210
ELECTRONIC SYSTEMS ANALYSIS 3 UNITS
Class hours: 3 lecture
Prerequisite: EL 200 or equivalent with a grade of Credit or "C" or higher, or concurrent enrollment.
Corequisite: None.
Recommendation: EL 210L or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
This is an advanced course which covers the theory of operation of various electronic systems; the analysis of switching and logic circuits; the theory of regulation and control systems, power supplies, and phase locked loops. (Formerly EL 40)
Transfer Credit: CSU

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. 1)
Transfer Credit: CSU

EL 212
ELECTRONIC COMMUNICATIONS 3 UNITS
Class hours: 3 lecture
Prerequisite: EL 202 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Corequisite: EL 212L.
Recommendation: None.
This course covers the principles of electronic communications with particular emphasis on transmitters, receivers, antennas, and transmission lines. Applications in commercial, military and amateur equipment are discussed. FCC rules and regulations are included. (Formerly EL 42)
Transfer Credit: CSU

EL 212L
ELECTRONIC COMMUNICATIONS LAB 1 UNIT
Class hours: 3 lab
Prerequisite: EL 202 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 INSTRUMENTS 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: EL 200 or equivalent with a grade of Credit or "C" or higher, or concurrent enrollment.
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 elec-

tronic 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 equivalentwith 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

(Science / Engineering / Math Division)

ENGY 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 ENGY 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 115 (CAN ENGR 12)
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 equivalents, inductors and capacitors, resister capacitor and resister coil circuits, and sinusoidal steady-state anlaysis and calculations. (Formerly ENGR 15)
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 135 (CAN ENGR 8)
STATICS 3 UNITS
Class hours: 3 lecture(Spring only)
Prerequisite: MATH 102 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)
Transfer Credit: CSU; UC

ENGLISH

(Liberal Arts Division)

ENGL 10 (Not degree applicable)
INTRODUCTION TO COMPUTERIZED WRITING **0 UNIT**
Class hours: 2 lab
Open entry/open exit
Corequisite: Concurrent enrollment in any English or Speech class.
This is an open-entry/open-exit self-paced English course to improve students' writing skills using computers. (Formerly ENGL 99)

ENGL 20 (Not degree applicable)
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 (Not degree applicable)
SPELLING BASICS **1 UNIT**
Class hours: 1 lecture
Prerequisite:None.
Corequisite:None.
Recommendation:None.
This course provides students with instruction in editing their own writing for standard spelling. This course is offered on a credit/no credit basis only. (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 provides students with instruction in editing their own writing for standard punctuation. This course is offered on a credit/no credit basis only. (Formerly ENGL 69. 6/ENGL 12. 1)

ENGL 32 (Not degree applicable)
SPELLING **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
This course is designed to help students overcome deficiencies in spelling by learning the patterns of language through a step by step instructional approach. The student learns to apply principles of spelling to groups of English words, from simple to complex. (Formerly ENGL 64)

ENGL 33 (Not degree applicable)
INDIVIDUALIZED ENGLISH **0 UNIT**
Class hours: 3 lab (17 weeks)
Open entry/open exit
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course assists students in improving and expanding writing and thinking skills needed for successful communication in their careers/and or professions. The course is taught by diagnostic-prescriptive methods, technology mediated instruction, and individualized instruction. (Formerly ENGL 66)

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.
This course develops the students' ability to write clearly, effectively, and correctly by guiding students through the writing process. Students write a series of compositions that integrate critical thinking, evaluative writing, and library research. (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 SEQ A)(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 on correctness. (It meets transfer requirements four four-year institutions.) (Formerly ENGL 1)
Transfer Credit: CSU; UC

ENGL 102 (CAN ENGL SEQ A)(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 or a satisfactory completion of the Advanced Placement English Examination of the College Entrance Examination Board.
Corequisite: None.
Recommendation: None.
This course develops critical thinking, reading, and writing beyond the level achieved in English 100 (Freshman Composition). The course focuses on the development of logical reasoning and analytical and argumentative writing skills. (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 literature, or modern literature, will be announced in the schedule of classes. It may be repeated with different topics for a maximum of 6 units. (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 (CAN ENGL SEQ C) (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 (CAN ENGL SEQ C)(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 mediations. A representative poet will be studied in depth. (Formerly ENGL 32)
Transfer Credit: CSU; UC

ENGL 233
READINGS IN THE NOVEL **3 UNITS**
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher.
This is a course in the novel emphasizing structure, theme and style. Outstanding Continental, English and American novels are studied. (Formerly ENGL 33)
Transfer Credit: CSU; UC

ENGL 234 (CAN ENGL 18)
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 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 article(s). Writers will gain understanding of each literary type, have the opportunity to create in each area, and be afforded the chance to have their work critiqued in a workshop setting. This course may be taken for a maximum of 6 units. (Formerly ENGL 40)
Transfer Credit: CSU; UC

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, and how they prefigured Romanticism and later movements. (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 literature from the ancient world to the 17th century. Various themes, forms and trends are examined in an effort to understand the universal problems of mankind. (Formerly ENGL 48/ENGL 48. 1)
Transfer Credit: CSU; UC

ENGL 248B
MASTERPIECES OF WORLD LITERATURE 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher.
This course studies Western and world literature from the 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 opportunity for practice in speech and writing. Texts and supplemental materials are used as well as students' personal experiences. English sounds are introduced and practiced. Writing and reading elements of the course stress comprehension. (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 intonational patterns of American English. Enunciation (production of sounds with clarity and precision) of American English in varying contexts will be stressed. Each student will be evaluated and assisted with his/her pronunciation difficulties. This course may be taken 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 **1.5 UNITS**
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
This course is for ESL students who wish to improve vocabulary skills. Emphasis is on general and specialized vocabulary development, dictionary skills, word recognition skills, improvement of sight vocabulary, and vocabulary-in-context techniques. (Formerly ESL 21/ESL 21. 1)

ESL 21B (Not degree applicable)
ESL ADVANCED VOCABULARY **1.5 UNITS**
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
This course is for advanced ESL students who wish to improve vocabulary skills at a level beyond that of intermediate (the 2000 most common words in English). 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 31 (Not degree applicable)
ESL READING **1.5 UNITS**
Class hours: 3 lecture (9 weeks)
Prerequisite: ESL 11 or equivalent with a grade of Credit or "C" or higher or satisfactory score on the ESL Placement Test.
This course improves the literal, interpretive and critical comprehension skills of the students. Emphasis is on identifying main ideas and significant details, sequence of relationships, inferences of fact and tone, figurative language, and propaganda.

ESL 32 (Not degree applicable)
AMERICAN EXPRESSIONS AND CULTURE **1.5 UNITS**
Class hours: 3 lecture (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 33 (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 34 (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 text books efficiently, taking notes, understanding textbook assignments, and preparing for examinations.

ESL 35 (Not degree applicable)
EDITING FOR ADVANCED GRAMMAR AND SYNTAX **1.5 UNITS**
Class hours: 3 lecture/1 lab (9 weeks)
Prerequisite: None.
Corequisite: ESL 100 or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
This course is designed for the advanced ESL students in writing courses who need help with grammar troublespots that cause difficulties in writing. Rather than provide English grammar review, the course concentrates on rules to help the student apply general principles. It will aid in finding ways to examine and evaluate writing in terms of grammatical accuracy. This course may be taken for a maximum of 6 units.

ESL 47T (Not degree applicable)
ESL TUTORIAL **0 UNIT**
Class hours: 3 lab
Open entry/open exit
Prerequisite: None.
This is an open-entry/open-exit self-paced course to familiarize students with ESL related Language Center resources to improve English grammar, idiom and standard usage pursuant to independent work. (Formerly ESL 99)

ESL 100
ESL WRITING AND STRUCTURE 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: Satisfactory completion of the English As A Second Language Placement Process or ESL 3 or equivalent with a grade of Credit or "C" or higher.
This course reviews syntax and sentence structure. Students write complex sentences in imitative and original essays. Written summaries are also included.
(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 SEQ B) (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 SEQ B) (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

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

GEOLOGY

(Science / Engineering / Math Division)

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 introductory course deals with the composition and structure of the earth. Internal and external forces by which the earth's crust and surface have been and are being changed are emphasized. (Formerly GEOL 1)
Transfer Credit: CSU; UC

GEOL 110
INTRODUCTION TO GEOLOGY **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 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. (Not open to those with credit in GEOL 101.)(Formerly GEOL 10)
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 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 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.
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

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

GRAPHIC DESIGN

SEE ART
(Art and Design)

HEALTH EDUCATION

(HPER / Athletics Division)

HED 100
CONTEMPORARY HEALTH PROBLEMS **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
Students will identify, analyze, and seek solutions to contemporary health issues. The learner will be exposed to such health components as improving nutrition and physical fitness, enhancing mental and emotional health, creating healthy and caring relationships, avoiding and overcoming destructive habits, preventing and fighting disease, and facing life's transitions. (Formerly HED 8)
Transfer Credit: CSU; UC

HED 110
COMMUNITY FIRST AID AND CPR **3 UNITS**
Class hours: 3 lecture
Prerequisite: 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

HEALTH OCCUPATIONS

(Health Occupations Division)

HO 9 (Not degree applicable)
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.

HO 9L (Not degree applicable)
EMERGENCY MEDICAL TECHNICIAN I LAB **2 UNITS**
Class hours: 3 lab and 3 hours arranged field experience.
Prerequisite: Completion of current immunization requirements for affiliating clinical agencies. Current CPR for Professional Rescuer Certification (minimum of 8 hours).
Corequisite: HO 9.
This course is designed to teach the student the practical skills necessary to perform prehospital emergency care service. Areas include assessment skills, equipment utilization, hospital and ambulance clinical experience. This course may be taken for a maximum of 4 units. Uniforms will be required. (Formerly HO 9. 1)

HO 50
EMERGENCY AND SAFETY MANAGEMENT **2 UNITS**
Class hours: 2 lecture
Prerequisite: None.
This course for allied health students will cover cardiopulmonary resuscitation and first aid techniques as specified by the American Red Cross. Topics will include one-and-two person CPR for infants, children, and adults; resuscitation with mask and bag-valve mask; and early intervention for wounds, burns, trauma and sudden illness. A Professional Rescuer CPR Card valid for one year and a Standard First Aid Certificate valid for three years will be earned with successful completion of the course. (Formerly HO 32)

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)

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 (CAN H EC 2)
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.
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.
Transfer Credit: CSU

HISTORY

(Humanities / Social Sciences Division)

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.
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 54 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 social welfare state; the ways that the Vietnam conflict, emergence of multiculturalism, and the new environmentalism have shaped contemporary policy and attitudes, and the pervasive and lasting influence of mass culture, technology and media. (Formerly HIST 10)
Transfer Credit: CSU; UC

HIST 220
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 covers the histories of Latin America, Canada, and the United States as an integrated whole. Emphasis is given to the Pre-Colombian setting, Native American heritage, the European conquest and legacy, distinctive colonial institutions, and the growth of independence movements. Major political, social, economic, and cultural factors will be presented focusing on the roles played by the diverse people and cultures who shared in the development of the nations of the Western hemisphere. (Formerly HIST 8.1)
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 20 or equivalent with a grade of Credit or "C" or higher and satisfactory completion of the Reading Placement Process or READ 43 with a grade of Credit or "C" or higher.
This course is an examination of the origins and evolution of the cultural, social, economic and political institutions, trends, events, issues, and leading personalities of Mexican History from the Pre-Columbian period to contemporary society. (Formerly HIST 31)
Transfer Credit: CSU; UC

HIST 240 (CAN HIST SEQ A)(CAN HIST 2)
WESTERN CIVILIZATION 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 with a grade of Credit or "C" or higher.
Recommendation: Satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of Credit or "C" or higher.
History 240 is a survey of the development of Western Civilization from the pre-historic era through the mid-seventeenth century A. D. It focuses on the contributions to this development of ancient Sumer, Egypt, classical Greece, Rome, Christianity, Byzantium, Islam, the Middle Ages, the Renaissance, and the Reformation. It acquaints students with the basic institutions, personalities, documents, and writings of the Western world which have influenced contemporary events. (Formerly HIST 4. 1)
Transfer Credit: CSU; UC

HIST 241 (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 241 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)
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 studies, emphasizing interaction between civilizations and major cultures. (Formerly HIST 6. 1)
Transfer Credit: CSU

HIST 250
HISTORY OF ENGLAND, GREAT BRITAIN AND THE COMMONWEALTH **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or "C" or higher.
History 250 is a survey of the history and institutions of Britain, the British Empire and The Commonwealth from the Norman Conquest to the present. It will focus upon medieval and early modern England, the creation of the first and second British Empires, and upon the development of Britain's economic, political and social institutions since the Glorious Revolution. The evolution of The Commonwealth and developing relations with the United States will also be studied. 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 and satisfactory completion of the Reading Placement Process or READ 43 with a grade of Credit or "C" or higher.
This course presents a general survey of the historical evolution of cultural, social, economic and political institutions and customs of the nations of Asia. The pre-19th Century sections of the course will emphasize institutions such as family, philosophies, religious viewpoints and life style. The post 18th Century periods will emphasize Western imperialism in Asia, nationalism, the independence movements, and the development of modern Asian states and societies. (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 political, economic, social and cultural institutions, western imperialism, Asian nationalism, the emergence of modern Asian states, international 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, architecture, sculpture, dance, literature and philosophy as they relate to the universal problems of humankind and today's students. Everyone will be encouraged to develop his/her own doctrine of humanity. (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 condition 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

(Science / Engineering / Math Division)

HUM 104
SCIENCE, LITERATURE AND HUMAN INSIGHT **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 an interdisciplinary, intercultural, team-taught course in which students learn to apply the principles of comparative critical analysis in order to better understand the relationships among literature, science, and technology. Through their study of literature, students learn about human values, behavior, and motivations; through their study of scientific and technological achievements, they learn about the methods and limitations of science. Major historical and contemporary themes linking science and literature are presented for evaluation. (Formerly HUM 4)
Transfer Credit: CSU; UC

(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 individual people. (Formerly HUM 5)
Transfer Credit: CSU

INDUSTRIAL ARTS

(Technology Division)
(FOR ADDITIONAL COURSES SEE ELECTRONICS, WOODWORKING MANUFACTURING TECHNOLOGIES, AUTOMOTIVE REPAIR, AND PLASTICS MANUFACTURING TECHNOLOGY)

IA 20 (Not degree applicable)
A SURVEY OF AUTOMATED MANUFACTURING FOR NON-TECHNICAL PERSONNEL (Elementary Robotics) **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, application, path control, and intelligence. The operation of different types of end effectors is covered, along with robot controllers and the basic system sensors. Programming techniques are covered.

JAPANESE

(Liberal Arts Division)

JAPN 101
ELEMENTARY JAPANESE **5 UNITS**
Class hours: 5 lecture + 1 hr. lab. arr.
Prerequisite:None.
This beginning Japanese course emphasizes listening, reading, writing, and speaking and helps to develop the appreciation of cultural diversity through the study of differences and similarities between cultures. (Formerly JAPN 1)
Transfer Credit: CSU; UC

JAPN 102
ELEMENTARY JAPANESE **5 UNITS**
Class hours: 5 lecture + 1 hr. lab. arr.
Prerequisite:JAPN 101 or equivalent with a grade of Credit or "C" or higher.
This beginning course continues to emphasize listening, reading, and writing, and speaking and helps to continue to develop the cultural diversity through the study of differences 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

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 coun-

tries. 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 (CAN JOUR 4)
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 newspapers, magazines, radio, television, books, and other mass media in shaping the political, economic, and social fabric of society. (Formerly JOUR 18)
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 equivalents with grades of Credit or "C" or higher, or concurrent enrollment.
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 equivalents 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 23)
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.
Recommendation: 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 26)
Transfer Credit: CSU

JOUR 130
PHOTO JOURNALISM **3 UNITS**
Class hours: 3 lecture
Prerequisite: PHOT 100 or equivalent with a grade of Credit or "C" or higher.
This course deals with the photographer as a journalist, focusing on theory and practice in press and publications photography, with emphasis on using the camera as a reporting and communications tool. Covered are news and feature photography and photographic essays, including composition, impact, and creativity, for newspapers, magazines, Internet and other mass communications media. Students must have access to a 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 103 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

JOUR 225
MAGAZINE EDITING AND DESIGN **2 UNITS**
Class hours: 2 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 serves as a foundation for students desiring to participate in the production of school magazines or yearbooks. It includes a study of and practice in planning and layout, copy, methods of printing, covers and binding, financing, photography, commercial art, advertising, and editing. It is recommended for majors in journalism, advertising, and commercial art. (Formerly JOUR 25)
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, ejector 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.
This course is an independent study on an experimental and research basis, using CAM software or CNC programming skill and knowledge in specialized areas of the student's choice with the approval and guidance of the department chairperson. The course may be taken for a maximum of 4 units. (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 Machinery's Handbook. Particular emphasis will be placed on solving problems of ratio and proportion, measurement system conversion, plane geometry, and right triangles as applied to machine fabricated parts. (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 multiaxis 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 54
CNC BLUEPRINT READING **2.5 UNITS**
Class hours: 2 lecture/2 lab
Prerequisite: MTT 50 or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
Corequisite: None.
Recommendation: None.
This course is designed to familiarize the student with blueprints and the conversion of blueprint data to workable fabrication data unique to the CNC machine shop. It will cover tool offset conversion, location, and identification of missing and pertinent coordinates, ANSI Y-14.5, visualization, and identification of attributes important to CNC programming. (Formerly CNC 15/MTT 15)

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)

MTT 60
ADVANCED MACHINE TOOL CONCEPTS 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite:None.
Corequisite:None.
Recommendation:MTT 100 or equivalent with grades of Credit or "C" or higher or equivalent.
This course is designed to extend the students' skills in modern machine tool operation and set up as well as to augment their knowledge of conventional and automated process techniques. Coursework includes refining complex geometric inspection techniques, developing advanced skills in lathe and mill setup, materials science, and learning Computer Aided Process Planning (CAPP). (Formerly CNC 3/MTT 3)

MTT 62
FIXTURE TOOLING 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: MTT 54 and MTT 60 or equivalent with grades of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course teaches planning, design, and fabrication of fixturing for the CNC shop. It includes decision making, machine planning, cutter selection, tolerancing, rest areas, clamping, blueprint interpretation, and design. (Formerly CNC 5/MTT 5)

MTT 76
CAD/CAM VIRTUAL GIBB 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.
Corequisite: None.
Recommendation: None.
This course prepares students to operate the Virtual Gibbs Programming System in conjunction with various multi-axis Computer Numerical Control (CNC) machinery. Students learn how to construct and import engineering geometry, to create tool paths, and to post process for specific machinery. (Formerly CNC 53/MTT 53)

MTT 80
CAD/CAM MOLD MACHINING 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: PMT 65, MTT 60, and MTT 170 or equivalent with grades of Credit or "C" or higher.
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)

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 154
SHOP FLOOR COMMUNICATIONS AND POST PROCESSING 4 UNITS
Class hours:3 lecture/3 lab
Prerequisite:None.
Corequisite:None.
Recommendation:MTT 51 or equivalent with a grade of Credit or "C" or higher.
This course is designed to provide the student with the skills required to manage data flow and data translation in a computer numerical control factory environment. Course work includes data management techniques, shop floor protocols, BASIC language introduction, and post processing of cut vectors via vendor supplied programs. (Formerly CNC 54/MTT 54)
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 courses with grades of Credit or "C" or higher or concurrent enrollment, or appropriate work experience.
This course includes numerical control programming as applied to machine tools including a description of control systems and the capabilities of each. Students will develop CNC machine tool programs used to make manufactured parts. Computers will be used to input, develop and proof CNC programs. This course is for the student who desires to be a machine tool operator, programmer, or who will be employed in related fields. (Formerly CNC 11/MTT 11)
Transfer Credit: CSU

MTT 172
PARTS PROGRAMMING 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite:MTT 170 or equivalent with a grade of Credit or "C" or higher.
This course will include manual and computer assisted programming techniques that will be applied to numerically controlled machine tools. Students will work on projects that include manuscript preparation, tape generation, and verification for numerically controlled machines with an emphasis on advanced aspects of machine control program. (Formerly CNC 21/MTT 21)
Transfer Credit: CSU

MTT 278
CAD/CAM ADVANCED 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: MTT 51 with a grade of Credit or "C" or higher or appropriate work experience.
This course advances the student's skill in the development of 3D surface models and tool paths using Mastercam. Students learn to create swept, ruled, revolved, Coons, draft, trimmed, and lofted surfaces using parametric and NURBS methodology. Modification of geometry/toolpath using parametric hooks will be emphasized. (Formerly CNC 55/MTT 55)
Transfer Credit: CSU

MANUFACTURING TECHNOLOGY

(Technology Division)

MFGT 50
HAZ-MAT 1.5 UNITS
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is a survey of the knowledge and skills that allow a person to work with hazardous materials in compliance with governmental regulations while at the same time to protect human health and the environment. Specific examples will include industry specific compliance, regulations, and controls. This includes an introduction to

Material Safety Data Sheets (MSDS) and basic materials handling as is typical in local industries. (Formerly MFGT 12/MFGT 30)

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 occupational work experience.
Work experience/career internship provides the opportunity for Manufacturing Technology students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to the major and job skills must be completed on the job/training site. These courses may be taken for a maximum of 15-16 units. (Formerly MFGT 73/74)

MFGT 51
INTRODUCTION TO COMPUTER INTEGRATED MANUFACTURING (CIM) 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course examines the relationships between management, design, and manufacturing of a product. Students will be introduced to the multi-faceted operations of the manufacturing industry. Case studies and demonstrations will be used to explore the development and implementation of an automated factory. This course is not open to students who have received credit in BCIS 46. (Formerly MFGT 46)

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.
Recommendation: TM 50 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
This technical course is for quality assurance personnel interested in applying statistical process control concepts. Materials covered include statistical methods for use in quantitative approaches to quality assurance and reliability including basic algebraic notation and formulation, functions, graphical analysis, probability laws, measures of central tendency and dispersion, frequency distributions, sampling plans and risks, control charts, and process capability studies. (Formerly MFGT 69. 14/MFGT 14)

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 studies. Related terms and methods of Quality Assurance (QA), Total Quality Management (TQM), International Standards Organization (ISO) 9000 quality standards, Statistical Process Control (SPC), just in time (JIT) as well as other quality tools will be outlined and identified. (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.

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.

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.

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 manufacturing individuals interested or actively involved in designing and conducting experiments. The course will help production and engineering personnel analyze a process and determine process variables that effect product characteristics. The development of efficient and economical test methods will cause reduction in variations of a product or process thus improving the production efficiency. Emphasis will be place on Design of Experiments fundamentals.

MFGT 60
QUALITY ASSURANCE PRINCIPLES 1.5 UNITS
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is an overview of quality control systems, organizational structure, quality costs, vendor relations, acceptance sampling, and customer relations. Emphasis will be placed on the importance of adequate product requirements. (Formerly MFGT 69. 13/MFGT 10)

MFGT 100
MANUFACTURING PROCESSES 3 UNITS
Class hours: 3 lecture
Prerequisite:None.
This course provides information on modern manufacturing processes and operations including process materials currently used in industry. (Formerly IP 25/MFGT 5)
Transfer Credit: CSU

MATHEMATICS

(Science / Engineering / Math Division)
(FOR ADDITIONAL COURSES SEE TECHNICAL MATHEMATICS)

MATH 9T (Not degree applicable)
MATHEMATICS-TUTORIAL 0 UNIT
Class hours: 2 lab
Corequisite: Enrollment in any Mathematics course.
This course is designed to facilitate the learning of mathematical knowledge, skills, and concepts through individualized and mediated instruction. It is open to any student enrolled in any mathematics course. (Formerly MATH 99)

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 class may be taken in Programmed Learning Sections. See your counselor for details.

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.
This course covers topics in pre algebra, informal geometry, and applied arithmetic including but not limited to percent, rates, scientific notation, tables, graphs, the real number line, an introduction to the Cartesian Coordinate system, problem solving techniques, signed numbers, simplifying and evaluating expressions and formulas, solving simple equations, numerical relationships involving lines, angles and polygons.

MATH 42 (Not degree applicable)
FOUNDATIONS IN APPLIED MATHEMATICS 4 UNITS
Class hours: 4 lecture/1 lab
Prerequisite: MATH 20 or equivalent with a grade of Credit or "C" or higher or satisfactory completion of the Math Placement Process.
Corequisite: None.
Recommendation: None.
This course investigates topics in pre-algebra and informal geometry from an applications perspective. It emphasizes the use of calculators, problem solving techniques, measurement, formulas, graphs, charts and tables, data collection, probability and statistics, ratios and proportions, scale drawing, as they apply to various careers and technical occupations in business and industry. It will include hands-on lab activities. This course will satisfy the prerequisite for entry into MATH 60. (This course is not open to students with credit in MATH 40.)

MATH 60
ELEMENTARY ALGEBRA 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 70
PLANE GEOMETRY 4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 60 or equivalent with a grade of Credit or "C" or higher or a 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, parallels, and similar figures. Skill development involving equalities, proportions, and areas of the above figures is included. Logical thinking is stressed in problem solutions. This course is designed for students who have not taken high school plane geometry. (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 application problems. Other topics include:the algebra of real and complex numbers, inequalities, and an introduction to conic sections. (This course is not open to students with credit in MATH 80A or MATH 80B)(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, rational exponents 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 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 is a nontechnical course surveying a variety of concepts in mathematics. Topics will include:elementary logic, algebra of sets, rational and real numbers, informal geometry, elementary combinatorics and probability, and elementary statistics. It is not open to student with credit in any transfer level math course. (Formerly MATH 10)
Transfer Credit: CSU; UC

MATH 101 (CAN MATH 16)
PRECALCULUS MATHEMATICS 4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 140 or equivalent with a grade of Credit or "C" or higher.
Entering students must attain a satisfactory score on the Calculus Readiness Test.
This course is a critical study of the algebra of real and complex numbers which includes selected topics such as the number system, inequalities, and the binomial theorem, sets, matrices, sequences and series. Exponential, logarithmic, polynomial and inverse functions are included. (Formerly MATH 5. 1)
Transfer Credit: CSU; UC

MATH 102(CAN MATH SEQ B & C)(CAN MATH 18)
ANALYTIC GEOMETRY AND
CALCULUS I 4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 101 or equivalent with a grade of Credit or "C" or higher.
Students who have not taken MATH 101 must attain a satisfactory score on the Calculus Readiness Test.
This course is the first semester of calculus, designed to meet lower division university and four-year college requirements. Topics included are differentiation and integration of algebraic, and trigonometric functions with applications. The necessary topics of analytic geometry are presented as needed to proceed with the principles of calculus. (Formerly MATH 5. 2)
Transfer Credit: CSU; UC

MATH 103(CAN MATH SEQ B & C)(CAN MATH 20)
ANALYTIC GEOMETRY AND
CALCULUS II 4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 102 or equivalent with a grade of Credit or "C" or higher.
This course is a continuation of Math 102. 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)
Transfer Credit: CSU; UC

MATH 110A
MATHEMATICS FOR ELEMENTARY
TEACHERS 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 includes introduction to logic, symbols, sentences and sets, real number structure including natural numbers, integers, rationals and irrationals; basic operations on the real numbers with basic laws and axioms; the division algorithm, prime factorization theorem and applications; operations with fractional and decimal notation; order of operations; systems of numeration including binary and decimal. It meets elementary education credential requirement. It is not open for credit to math majors. (Formerly MATH 6/MATH 6. 1)
Transfer Credit: CSU; UC

MATH 110B
MATHEMATICS FOR ELEMENTARY
TEACHERS 3 UNITS
Class hours: 3 lecture
Prerequisite:MATH 110A or equivalent with a grade of Credit or "C" or higher.
This course includes elements of logic and the basic concepts of informal geometry. The course is designed to develop measurement and geometric concepts of two and three dimensional spaces. It meets elementary education credential requirements. It is not open for credit to math majors. (Formerly MATH 6. 2)
Transfer Credit: CSU, UC

MATH 112 (CAN STAT 2)
ELEMENTARY STATISTICS 4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 80 or MATH 80B or equivalent with a grade of Credit of "C" or higher 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 or "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 17)
Transfer Credit: CSU; UC

MATH 115 (CAN MATH 12)
FINITE MATHEMATICS **4 UNITS**
Class hours: 4 lecture
Prerequisite: MATH 80 or MATH 80B or equivalent with a grade of Credit or "C" or higher. Students who have not taken MATH 80 or MATH 80B must attain a satisfactory score on the Advanced Math Readiness Test.
This course includes sets, matrices, system of equations and inequities, linear programming, permutations and combinations probability and topics from statistics. Applications of various topics from business, social and behavioral sciences are included. (Formerly MATH 15)
Transfer Credit: CSU; UC

MATH 116 (CAN MATH 34)
CALCULUS FOR MANAGERIAL, BIOLOGICAL AND SOCIAL SCIENCES **4 UNITS**
Class hours: 4 lecture
Prerequisite: MATH 80 or MATH 80B or equivalent with a grade of Credit or "C" or higher. Students who have not taken MATH 80 or MATH 80B must attain a satisfactory score on the Advanced Math Readiness Test.
This course 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 multivariables, related rates, areas, and curve sketching. This course is not open to students with credit in Mathematics 102. The class does not meet the prerequisite for Mathematics 103. (Formerly MATH 16)
Transfer Credit: CSU; UC

MATH 140 (CAN MATH 8)
TRIGONOMETRY **3 UNITS**
Class hours: 3 lecture
Prerequisite: MATH 80 (or MATH 80B) and MATH 70 or equivalent with grades of Credit or"C" or higher. Students who have not taken MATH 80 or MATH 80B must attain a satisfactory score on the Advanced Math Readiness Test.
This course includes circular functions, inverses, graphs, angles and trigonometric functions, solutions of right and oblique triangles, identities, solution of equations, and complex numbers. (Formerly MATH 21)
This class may be taken in Programmed Learning Sections. See your counselor for details.
Transfer Credit: CSU

MATH 150A
COMPUTER APPLICATIONS FOR PRECALCULUS **1 UNIT**
Class hours: 3 lab
Prerequisite: MATH 101 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 and augment MATH 101 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 170A
COMPUTER APPLICATIONS FOR CALCULUS I **1 UNIT**
Class hours: 3 lab
Prerequisite: MATH 102 or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
Corequisite: None.
Recommendation: None.
This course is an introduction to modern mathematical software as used in most universities and in industrial applications where scientific research is commonplace. The topics will be specifically selected to enhance Calculus I using the powerful numeric, symbolic and graphical capabilities of mathematical software that is currently available. (Formerly MATH 75. 2)
Transfer Credit: CSU

MATH 190A
COMPUTER APPLICATIONS FOR CALCULUS II **1 UNIT**
Class hours 3 lab
Prerequisite: MATH 103 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 103 or equivalent with a grade of Credit or "C" or higher.
This course is a continuation of Math 103. 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 103 or equivalent with a grade of Credit or "C" or higher.
Recommendation: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

MEDICAL ASSISTANT

(Health Occupations Division)

MA 60
INTRODUCTION TO MEDICAL ASSISTING **2 UNITS**
Class hours: 2 lecture
Prerequisite: None.
This is an introductory course to study the history of medicine and paramedical professions. Generalized and specialized careers in medical assisting, personal and professional responsibilities, medical ethics and law, communications and records are discussed. The focus is on front office responsibilities, customer service philosophy, and basic communication skills. (Formerly MA 40)

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)

MA 64
MEDICAL OFFICE ASSISTING **3 UNITS**
Class hours: 2 lecture/3 lab
Prerequisite: None.
This course includes instruction in developing skills and techniques in the assisting of physical examinations, naming, care and setting-up of instruments, sterilization, and operating room procedures. (Formerly MA 44)

MA 66
MEDICATIONS AND SPECIALITIES **3 UNITS**
Class hours: 2 lecture/3 lab
Prerequisite: None.
This course prepares the student to prepare and administer medications, maintain narcotic control records, and assist the specialist with examinations. This course meets the requirements as set forth in the laws relating to the utilization of medical assistants within the Medical Practice Act. (Formerly MA 46)

MA 67
MEDICAL OFFICE ADMINISTRATION **3 UNITS**
Class hours: 3 lecture
Prerequisite: MA 60, BASS 62, and BASS 3T, or equivalents with grades of Credit or "C"or higher.
This course is designed to develop skills in administrative procedures in the medical office. Topics include telecommunications; bookkeeping, billing and collections; payroll; policy and procedure development; medical records; verbal and written communication for the medical office; and additional office management techniques. (Formerly MA 47)

MA 68
MEDICAL ASSISTING INTERNSHIP EXPERIENCE **4 UNITS**
Class hours: 1 lecture/180 variable semester hours
Prerequisite: MA 60, 62, 64, 161, HO 53, 54 and HO 55 or equivalent with grades of Credit or "C" or higher. Valid certification for cardiopulmonary resuscitation and American Red Cross first aid training (9 hour course).
Corequisite: MA 66 or prior completion with a grade of Credit or "C" or higher.
This course is designed to provide opportunities for the student to intern a medical facility while receiving supervised instruction in direct patient care. (Formerly MA 48)

MA 73/74
MEDICAL ASSISTANT OCCUPATIONAL WORK EXPERIENCE **3-4 UNITS**
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Medical Assistant work experience 73 or 20 hours of employment per week for Medical Assistant work experience 74. The employment must be in a job related to the student's educational goal.
Prerequisite: None.
Corequisite: (1) Enrollment in the Medical Assistant vocational program with 7 or more units including occupational work experience.
Occupational Work Experience is a supervised employment program in an approved work station related to the student's declared major. Students meet with their instructor for a minimum of one hour per week and will receive credit for on-the-job learning experiences that are new or are an expansion of their regular responsibilities. This course may be repeated for a maximum of 8 units based on the number of hours on the job.

MA 161
MEDICAL TERMINOLOGY **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
This course will prepare the student in the correct use of medical terms, abbreviations, phraseology, and the understanding of word parts. It will include analyzing the terms by written and oral communication of the various systems of the body. (Formerly MA 41)
Transfer Credit: CSU

METALLURGY AND MATERIALS SCIENCE

(Technology Division)

MET 50
NONFERROUS HEAT TREAT **2 UNITS**
Class hours: 1 lecture/3 lab
Prerequisite:None.
Recommendation:MET 100A or equivalent with a grade of Credit or "C" or higher.
This course will cover the effects of heat treating related to the mechanical and physical properties of non-ferrous metals. Techniques, processes and equipment used in the industrial heat treating facility; relationship of metallic phases and precipitation hardening will be emphasized. In addition theory and application of thermocouples in pyrometry, photomicrography and photomacrography of the effects of heat treatment on microstructures are included. (Formerly MET 42. 2/MET 42)

MET 50A
HEAT TREATING FERROUS MATERIALS **1.5 UNITS**
Class hours: 3 lecture (9 weeks)
Prerequisite: MET 100A or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course will include select heat treat specifications for the processing of ferrous materials to meet ARP 1962 requirements for heat treating. The course will cover the following:MIL-Q9895, MIL-Std 1535, MIL-H-6875, AMS 2759, MIL-S-6090, and MIL-Std 12515. (Formerly MET 42. 3)

MET 51
WELDING METALLURGY **2 UNITS**
Class hours: 4 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: WELD 100 or equivalent or employment in the metal joining industries.
This course is an introduction to the study of metals with an emphasis on the effects of welding on metals. The course is applicable for those students seeking a career in welding inspection. The structure of matter, chemical, physical, and mechanical properties of metals, principles of alloying, solid state diffusion, plastic deformation, and heat treatment will be studied. The course will include demonstrations and exercises in the use of metallurgical testing equipment and tools found in the industry. (Formerly MET 48)

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

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.

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, tungsten, niobium, molybdenum, platinum, gold and silver. Emphasis will be placed on the study of properties, fabrication, testing, castings, forgings, powder metals and the unique applications of each material. The metallurgical characteristics and selection of nonferrous types for specific applications will be emphasized. (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/1 lab
Prerequisite: None.
This course is an introduction to the study of metals and non-metals; structure of matter; chemical, physical and mechanical properties of metals and alloys; and non-metals including polymers, ceramics and composite materials. Principles of alloying, solid state allotropy, plastic deformation and heat treatment will also be studied. The course will also include demonstrations and laboratory practice in the use of metallurgical testing equipment commonly used in industry. (Formerly MET 10)
Transfer Credit: CSU

MET 100B
METALLURGY II 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: MET 100A or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course is designed to further student's skills in the study of the select spectrum of ferrous and nonferrous alloys, such as steel, steel alloys, copper alloys, nickel alloys, titanium and aluminum. Emphasis will be placed on the application of metallurgy principles, properties and laboratory practices. (Formerly MET 12)

MET 120
NON-DESTRUCTIVE TESTING 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
This is a survey course designed to familiarize the student with nondestructive testing theory and applications. The major emphasis is on the "basic five" nondestructive testing methods: liquid penetrant, magnetic particle, radiographic, ultrasonic, and eddy current. Students will learn to use these methods and to evaluate available NDT methods as they apply to quality control. (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)

MICR 200 (CAN BIOL 14)
PRINCIPLES AND APPLICATIONS OF MICROBIOLOGY **5 UNITS**
Class hours: 3 lecture/6 lab
Prerequisite: CHEM 100 or BIOL 120 or ZOOL 120 or equivalents 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 immuno deficiency syndrome research and recombinant deoxyribonucleic acid technology arediscussed. 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 1L (Not degree applicable)
MUSIC LABORATORY **0 UNIT**
Class hours: 1 lab arranged.
Corequisite: Enrollment in any music class.
This course is an open entry and open exit laboratory designed for students taking any music course. Students will have access to listening stations (compact disk and tape recorders), TapMaster rhythm machines, synthesizer lab, and computer for aural skills, visual recognition of music, and musical vocabulary. May be repeated. (Formerly MUS 9)

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 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

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 ñ' 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.
Recommendation: None.
This course introduces students to rock and its influence on American popular music. The students will learn how to actively engage with music by relating rock to other styles of music, relating music to text, and relating rock to its cultural context.
Transfer Credit: CSU

THEORY

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 (CAN MUS 2)
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 (CAN MUS 4)
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. Attention is given in advanced four-part chorale writing, piano style writing, secondary triads, advanced modulation, inversion, dominant 7ths, non-dominant seventh chords, ninth chords, eleventh chords, and thirteenth chords. Other topics to be covered are advanced keyboard harmony and dictation, advanced chromatic scale degrees, and chordal dictation involving secondary dominants. There will be the continuing study and usage of music software, rhythm machines, and computer-based notation programs. (Formerly MUS 13)
Transfer Credit: CSU; UC

MUS 110
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)
Transfer Credit: CSU; UC

MUS 111
MUSIC NOTATION AND COPYING **1 UNIT**
Class hours: 1 lecture/2 lab
Prerequisite: None.
This course provides instruction and practical experience in the basic techniques of music notation, the making of notes, rests, symbols, and characters found in music manuscripts. It also includes the use and care of tools and equipment. (Formerly MUS 25)
Transfer Credit: CSU

MUS 144
ELECTRONIC SYNTHESIZER I **2 UNITS**
Class hours: 2 lecture/2 lab
Prerequisite: None.
This class is an introduction to MIDI, synthesizer programming, sampling, computer sequencing, drum machine technique, and computer composition. Also, the course introduces the basics of acoustics and the physical properties of sound. Compositions will be required of all students. Individual studio time is provided. This course may be taken 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: 1 lecture/3 lab
Prerequisite:None.
Recommendation:MUS 105 or equivalent with a grade of Credit or "C" or higher.
This course introduces the student to the methods of audio recording for the performing arts. It includes the technical, as well as the artistic, aspects of recording. Emphasis will be placed on the practical use of audio equipment both in a studio situation and on location. This course may be taken 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

MUS 120
ELEMENTARY 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
ELEMENTARY 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
INTERMEDIATE GUITAR I 2.5 UNITS
Class hours: 2 lecture/1 lab plus 1 hr. lab arr.
Prerequisite: MUS 121 or equivalent with a grade of Credit or "C" or higher.
This class includes instruction in scales, chords, and arpeggios in all keys and positions. Included are intermediate levels of improvisation, accompanying, 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
INTERMEDIATE 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 or equivalent.
This class covers the mastery of the entire guitar fingerboard, a study of intermediate and advanced music in several styles, and the principles of improvisation and transposition. This course may be taken 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 market place and job opportunities. It teaches the student about the important jobs in the industry and their duties and responsibilities. Topics include the process of promotion, publicity, management, touring, recording, contracts, accounting, artists relations and development, marketing, advertising, copyrights, and related music fields. (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 147
BASIC APPLIED MUSIC 1 UNIT
Class hours: 1 lecture plus 6 hours arranged
Prerequisite: None.
Corequisite: Enrollment in a music-performance course related to the student's private study: MUS 124, 125, 126, 127, 129, 132, 133, 134, 138, 139, 140 or 142
This course offers 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 148
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, 125, 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 on technique and repertoire representative of various periods and composers 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 149
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, 125, 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 on technique and repertoire representative of various periods and composers 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 32)
Transfer Credit: CSU; UC

MUS 150
PRIVATE STUDY / RECITAL III 1 UNIT
Class hours: 1 lecture plus 6 hours arranged
Prerequisite: None.
Corequisite: Enrollment in a music-performance course related to the student's private study: MUS 124, 125, 126, 127, 132, 133, 134, 138, 139, 140, or 142
This course offers applied instruction in voice, piano or traditional band or orchestral instrument with an assigned instructor on the applied music staff. Emphasis on technique and repertoire representative of various periods and composers 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 33)
Transfer Credit: CSU; UC

MUS 151
PRIVATE STUDY / RECITAL IV 1 UNIT
Class hours: 1 lecture plus 6 hours arranged
Prerequisite: None.
Corequisite: Enrollment in a music-performance course related to the student's private study: MUS 124, 125, 126, 129, 130, 131, 132, 133, 134, 138, 139, 140, or 142
This course offers applied instruction in voice, piano, or traditional band or orchestral instrument with an assigned instructor on the applied music staff. Emphasis on technique and advanced repertoire representative of various periods and composers. Includes one hour per week recital attendance and one hour individual lesson per week. Performance for a faculty jury will be required at the end of the semester. This course may be repeated for a maximum of 2 units. (Formerly MUS 34)
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**
Class hours: 2 lecture/2 lab (Fall only)
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 preparation and performance of standard orchestral works. Emphasis is placed upon a high degree of musicianship and fine ensemble playing. Two or three concerts are given each semester. This course may be taken for a maximum of 4 units. This course is not open to students with credit in MUS 73. (Formerly MUS 73. 1)
Transfer Credit: CSU; UC

MUS 129
WOODWIND ENSEMBLE **1.5 UNITS**
Class hours: 1 lecture/2 lab
Prerequisite: Audition.
This class provides each individual student the opportunity to learn and execute the principles of woodwind ensemble playing that only intimate chamber music can provide. Among the topics covered will be musical styles, phrasing, balance and blending techniques, intonation, rehearsal techniques, and performance experience. This course may be taken 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 student the opportunity to learn and execute the principles of brass ensemble playing that only intimate chamber music can provide. Among the topics covered will be musical styles, phrasing, balance and blending techniques, intonation, rehearsal techniques, and performance experience. This course may be taken for a maximum of 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 student the opportunity to learn and execute the principles of percussion ensemble playing that only intimate chamber music can provide. Among the topics covered will be musical styles, phrasing, balance and blending techniques, intonation, rehearsal techniques, and performance experience. This course may be taken for a maximum of 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 litera-

ture. 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 little or no previous vocal experience. Emphasis will be placed on the developmentof 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
COLLEGE CHORUS **2.5 UNITS**
Class hours: 2 lecture/2 lab
Prerequisite: None.
This choral ensemble is designed to 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

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)
(FOR ADDITIONAL COURSES SEE HEALTH OCCUPATIONS)

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 medical terminology and 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 26 (Not degree applicable)
CLINICAL WORKSHOP 2 **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 second year of the nursing program. Included are assessment processes and individualized planning to assist the student in attaining the necessary level of skills competence to support success in the nursing program. This course is offered on a credit/no credit basis only. This course may be taken for a maximum of 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 207
MEDICAL-SURGICAL NURSING III 5 UNITS
Class hours: 5 lecture/15 lab (9 weeks)
Prerequisites:NRSG 214 or NRSG 200 or equivalent with grades of Credit or "C" or higher.
Corequisite: HO 236 and HO 237 or equivalents or prior completion with grades of Credit or "C" or higher.
The focus of this course is on increasingly complex nursing theory and clinical application of additional skills required for the care of adult medical-surgical patients in an acute care setting. The student will participate as a member of the health care team and will demonstrate in-depth application of nursing process utilizing the Roy Adaptation Model. Special emphasis is placed upon nursing intervention and the evaluation process in each of the four adaptive modes (physiologic, self-concept, role function, and interdependence.) The student must receive a "C" or better in the lecture component and a satisfactory grade in clinical lab in order to pass the course. (Formerly NRSG 1. 3)
Transfer Credit: CSU

NRSG 208
OBSTETRICAL / PEDIATRIC NURSING 5.5 UNITS
Class hours: 6 lecture/15 lab (9 weeks)
Prerequisite:NRSG 207 or equivalent with a grade of Credit or "C" or higher.
Corequisite: HO 236 and HO 237 or equivalents or prior completion with grades of Credit or "C" or higher.
This course consists of two modules which encompass theory and clinical application of concepts related to nursing care of families. The focus of each module is on the nursing process utilizing the Roy Adaptation Model. Content includes:normal and pathophysiological conditions of the female reproductive system during the child-bearing period; high risk conditions in the child bearing family; and acute, chronic, and catastrophic conditions of childhood and adolescence. 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 1. 4)
Transfer Credit: CSU

NRSG 210
FUNDAMENTALS OF NURSING 2 UNITS
Class hours: 3 lecture/9 lab (6 weeks)
Prerequisite: A&P 130, MICR 200, HO 151 or HO 152, HO 236, HO 237 , PSYC 100 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

NRSG 212
MEDICAL-SURGICAL NURSING 1 3.5 UNITS
Class hours: 6 lecture/13.5 lab (9 weeks)
Prerequisite: NRSG 210 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: NRSG 211 and NRSG 213, or equivalents 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 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.
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 grades of Credit or "C" or higher or successful completion of the college placement process.
This course introduces Licensed Vocational Nurses and students transferring from other nursing programs to the theoretical framework used in the Cerritos College Nursing Program. The roles of the Associate Degree Nurse as Provider of Care, Manager of Care and Member of the Discipline of Nursing are surveyed. The Roy Adaptation Model for Nursing is taught as the basis for providing nursing care. Content also includes communication theory and application, client teaching concepts, assertion theory, and critical thinking foundational skills. Assessment of prior learning is used to guide individual students in preparing for advanced placement in the nursing program. (Formerly NRSG 1.5)
Transfer Credit: CSU

NRSG 218
PSYCHOSOCIAL NURSING 3.5 UNITS
Class hours:4 lecture/9 lab (9 weeks)
Prerequisite: NRSG 208, HO 236 and HO 237 or equivalents with grades of Credit or "C" or higher. For Option C Students may take HO 236 and HO 237 concurrently.
The focus of this course is on the theory and clinical application of nursing process through utilization of the Roy Adaptation Model in the care of clients in the acute psychiatric setting, substance abuse rehabilitation programs, and community living for the geron population. Emphasis will be on:maladaptive psychosocial behavior, rehabilitation and detoxification of clients who are abusing chemicals, therapeutic management of psychosocial disorders, and geron community living and preventive mental disability as alternatives to institutionalization. Uniforms may be 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. 2)
Transfer Credit: CSU

NRSG 219
MEDICAL-SURGICAL
NURSING IV 5.5 UNITS
Class hours: 6 lecture/15 lab (9 weeks)
Prerequisite:NRSG 218 and HO 236 and HO 237 or equivalents with grades of Credit or "C" or higher. For Option C, D, and E Students: Admission to the Nursing Program. For Option C Students: Completion of HO 236 and HO 237 or equivalents with grades of Credit or "C" or higher or concurrent enrollment.
The focus of this course is on the theory and application of the nursing process based on the Roy Adaptation Model in the care of the seriously ill medical-surgical patient with emphasis on the geron and patients undergoing rehabilitative therapies. Principles of leadership are introduced and applied clinically. Theories and principles of nursing care related to medical-surgical patients, introduced in previous courses, will continue to be emphasized and refined. 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)
Transfer Credit: CSU

NRSG 220 Effective Spring 2001
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 in 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 1. 3/NRSG 207)
Transfer Credit: CSU

NRSG 222 Effective Spring 2001
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 Effective Fall 2001
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 Effective Fall 2001
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.
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 preceptee 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

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 equivalents 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 preceptee 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

OFFICE TECHNOLOGIES

SEE BASS
(Business Administrative Support Systems)

ORNAMENTAL HORTICULTURE

(Science / Engineering / Math)

ORNH 1 (Not degree applicable)
LANDSCAPE-GARDENER TRAINING3 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)

ORNH 2 (Not degree applicable)
BONSAI 1 UNIT
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)
ADVANCED BONSAI 1 UNIT
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)
ADVANCED SPECIAL OCCASIONS FLORAL DESIGN III **2 UNITS**
Class hours: 1.5 lecture/1.5 lab
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)
ADVANCED SPECIAL OCCASIONS FLORAL DESIGN IV **2 UNITS**
Class hours: 1.5 lecture/1.5 lab
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 33. 4)

ORNH 50
BASIC LANDSCAPE IRRIGATION **1.5 UNITS**
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
ADVANCED LANDSCAPE IRRIGATION **1.5 UNITS**
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 include plumbing codes, fountains, pools, automatic controls, cost estimating and related subjects. (Formerly ORNH 21)

ORNH 52
RESIDENTIAL LANDSCAPE DESIGN **1.5 UNITS**
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
COMMERCIAL LANDSCAPE DESIGN **1.5 UNITS**
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 material 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
LANDSCAPE CONTRACTING / MANAGEMENT **1.5 UNITS**
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 of 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
LANDSCAPE CONTRACTING / OPERATIONS **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 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
PLANT DISEASE CONCEPTS **1.5 UNITS**
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
PLANT DISEASE MANAGEMENT **1.5 UNITS**
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
INTERIOR PLANTSCAPES: HOUSEPLANTS **2 UNITS**
Class hours:2 lecture/1 lab
Prerquisite: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 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 emphasizes advanced floral techniques and upscale designs for fall and winter 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 33. 1)

ORNH 61B
SPECIAL OCCASIONS 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 emphasizes advanced floral designs for special occasions which occur in the spring season. A wide variety of flowers will be used in developing class and individual projects. 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 100 and ORNH 180 or equivalent with grades 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 100 and ORNH 180 or equivalent with grades 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 course 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)

PHAR 45
RETAIL PRODUCTS FOR PHARMACY CLERKS **2 UNITS**
Class hours: 3 lecture (12 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides basic knowledge about Over-the-Counter (OTC) products in relation

to their accepted therapeutic uses. Students will understand the steps involved in safely choosing a non-prescription product. (Formerly PHAR 5)

PHAR 47
PHARMACY CLERK CLINICAL EXPERIENCE **2 UNITS**
Class hours: 1 lecture/123 variable semester lab hours (6 weeks)
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.
Corequisite: None.
Recommendation: None.
This course is designed to provide the student with practical clerk experiences in selected outpatient community pharmacy settings working under the supervision of a registered pharmacist. (Formerly PHAR 6)

PHAR 50
PHARMACEUTICS **1.5 UNITS**
Class hours: 3 lecture (9 weeks)
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)

PHAR 60
INTRODUCTION TO PHARMACY **1 UNIT**
Class hours: 3 lecture (6 weeks)
Prerequisite: None.
Corequisite: 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)

PHAR 61
PHARMACY SKILLS DEVELOPMENT **1 UNIT**
Class hours: 3 lecture (6 weeks)
Prerequisite: None.
Corequisite: 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 corequisite is required for Pharmacy Clerk track; no corequisite is required for Pharmacy Technician track. (Formerly PHAR 3/PHAR 10. 1)

PHAR 62
PHARMACY OPERATIONS I **0.5 UNIT**
Class hours: 2 lecture/1 lab (6 weeks)
Prerequisite:PHAR 60 and PHAR 61 or equivalents 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)

PHAR 63
PHARMACY OPERATIONS II **2 UNITS**
Class hours: 2 lecture/1 lab
Prerequisite: PHAR 62, BASS 62, and BASS 135 or equivalents with grades of Credit or "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 formularies, patient profiles, patient charts, processing of medication orders, drug manufacturing and packaging, and computers. (Formerly PHAR 13)

PHAR 64
PHARMACY OPERATIONS III **2 UNITS**
Class hours: 2 lecture/1 lab
Prerequisite: PHAR 50 and PHAR 63 or equivalents with grades of Credit or "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)

PHAR 81
OVER-THE-COUNTER PRODUCTS **3 UNITS**
Class hours:3 lecture.
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)

PHAR 83
PHARMACY TECHNICIAN PHARMACOLOGY I **3 UNITS**
Class hours: 3 lecture
Prerequisite: MA 161 or equivalent with a grade of Credit or "C" or higher.
Recommendation: A&P 120 or equvialent 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)

PHAR 85
PHARMACY TECHNICIAN PHARMACOLOGY II **3 UNITS**
Class hours:3 lecture
Prerequisite:MA 161 or equivalent with a grade of Credit or "C" or higher.
Recommendation: A&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 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)

PHAR 90
CLINICAL EXPERIENCE I **3 UNITS**
Class hours: 1 lecture/120 variable semester lab hours
Prerequisite:PHAR 50, PHAR 63 and PHAR 81 or equivalents with grades of Credit or "C" or

higher. Verification of negative chest x-ray or non-reactive T. B. skin test within the last year. This course is designed to provide the student with practical experiences in selected out-patient community pharmacy settings working under the supervision of a registered pharmacist. (Formerly PHAR 31)

PHAR 95
CLINICAL EXPERIENCE II 5 UNITS
Class hours: 1 lecture/200 variable semester lab hours
Prerequisite: PHAR 64, PHAR 83, and PHAR 85 or equivalent with grades of Credit or "C" or higher. Verification of negative chest x-ray or non-reactive T. B. skin test.
This course is designed to provide the student with practical experiences in the classroom lab and in selected hospital pharmacy settings working with intravenous additives and sterile extemporaneous packaging areas. (Formerly PHAR 41)

PHAR 173/174
PHARMACY TECHNICIAN OCCUPATIONAL WORK EXPERIENCE 3-4 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 is a humanities course developing philosophical concepts through problems and systems of thought in selected Western philosophers such as Socrates, Plato, Aristotle, Augustine, Aquinas, Bacon, Kant, etc; it, furthermore, studies modern movements in Western culture such as dialectical materialism, pragmatism, analytic philosophy, and existentialism. (Formerly PHIL 5)
Transfer Credit: CSU; UC

PHIL 102 (CAN PHIL 4)
INTRODUCTION TO ETHICS 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process to enter ENGL 100, or ENGL 52 or equivalent with a grade of Credit or "C" or higher.
This course represents a survey of the major theories of value in the writings of some prominentphilosophies of Western culture and Oriental tradition,with special attention to a critical evaluation of their relevance to educational, ethical, esthetic, religious, and social problems of our times. (Formerly PHIL 6)
Transfer Credit: CSU; UC

PHIL 104
PHILOSOPHY OF CULTURAL DIVERSITY: CHALLENGE AND CHANGE 3 UNITS
Class hours: 3 lecture
Prerequisite:None.
Corequisite:None.
Recommendation:ENGL 52 or equivalent with a grade of Credit or "C" or higher is strongly recommended.
This humanities course is designed to create understanding, appreciation, and tolerance of diverse cultures, particularly those of non-Western civilizations which are ethnic minority groups in American culture. Topics covered will include the nature of culture, the epistemology of cultural diversity, world views, religion, traditional values, ethnocentrism, cultural relativism, cultural pluralism, and the philosophy of liberation. (Formerly PHIL 8)
Transfer Credit: CSU; UC

PHIL 106 (CAN PHIL 6)
INTRODUCTION TO LOGIC 3 UNITS
Class hours: 3 lecture
Prerequisite: ENGL 100 or equivalent with a grade of Credit or "C" or higher.
This course gives an introduction to the basic principles of inductive and deductive reasoning, the uses of language, definition, analysis of fallacious arguments in various areas, and integration of composition and critical thinking skills. (Formerly PHIL 12)
Transfer Credit: CSU; UC

PHIL 200
WORLD RELIGIONS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or ENGL 155 or equivalent with a grade of Credit or "C" or higher is strongly recommended.
This course presents a comparative study of the major religions of the world including Hinduism, Buddhism, Taoism, Shinto, Judaism, Christianity, Islam, etc. The survey pertains to their origin, historic development, primary source book, theological doctrines and value system. (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 philosophies. Students will become familiar with the diversity of styles, methods and approaches twentieth century philosophers have developed in response to the problems of self, subjectivity, consciousness, alienation, anxiety, authenticity, social justice, realism, relativism and the role of meaning and language in philosophical inquiry. (Formerly PHIL 9)
Transfer Credit: CSU; UC

PHIL 202
CRITICAL THINKING AND ARGUMENTATIVE WRITING 3 UNITS
Class hours: 3 lecture
Prerequisite:ENGL 100 or equivalent with a grade of Credit or "C" or higher.

Corequisite:None.
Recommendation:None.
This course develops critical thinking skills necessary for evaluating and formulating argumentative/persuasive essays and practice in applying those skills. (Formerly PHIL 11)
Transfer Credit: CSU; UC

PHIL 204
PHILOSOPHY OF THE BIBLE I (HEBREW SCRIPTURES) 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process to enter ENGL 100, or ENGL 52 or equivalent with a grade of Credit or "C" or higher.
This course is a general introduction to the philosophical, religious, cultural and historical influences on the development of the Hebrew Scriptures. The methods of critical analysis of Biblical materials from an academic point of view will be presented and discussed. (Formerly PHIL 15)
Transfer Credit: CSU; UC

PHIL 206
PHILOSOPHY OF THE BIBLE II (CHRISTIAN SCRIPTURES) 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process to enter ENGL 100, or ENGL 52 or equivalent with a grade of Credit or "C" or higher.
This course is a general introduction to the philosophical, religious, cultural and historical influences on the development of the Christian Scriptures. The methods of critical analysis of Biblical materials from an academic point of view will be presented and discussed. (Formerly PHIL 16)
Transfer Credit: CSU; UC

PHOTOGRAPHY

(Fine Arts / Communications Division)

PHOT 100 (CAN ART 18)
INTRODUCTORY PHOTOGRAPHY 3 UNITS
Class hours:2 lecture/4 lab
Prerequisite:None.
This is a beginning course in the theory and practice of photography. The lecture portion of the class will emphasize historical trends, contemporary applications, and an appreciation of photography as an art and as a craft. The lab portion will introduce the student to camera technique, film exposure, processing, darkroom techniques, lighting, and composition. (Formerly PHOT 29)
Transfer Credit: CSU; UC

PHOT 102
INTERMEDIATE PHOTOGRAPHY 3 UNITS
Class hours:2 lecture/4 lab
Prerequisite:PHOT 100 or equivalent with a grade of Credit or "C" or higher.
This is a black-and-white photography course dealing with special film processing techniques, high-contrast applications, and a continuation of principles taught in the introductory class. Introduction to large format cameras, copying techniques, lighting setups, and commercial applications of photography will be covered in the lectures and in the laboratory. (Formerly PHOT 30)
Transfer Credit: CSU

PHOT 110
INTRODUCTION TO DIGITAL PHOTOGRAPHY 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides an introduction to the basics of digital photography. Topics include use of digital cameras; scanning techniques; file compression and formatting; use of image editing software (primarily Adobe Photoshop); printing techniques; and legal, philosophical and sociological issues associated with digital photography. Emphasis is placed on constructing meaning in imagery through digital techniques. (Formerly PHOT 92)
Transfer Credit: CSU

PHOT 112
INTERMEDIATE DIGITAL PHOTOGRAPHY 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 110 or ART 192 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course continues the instruction in digital photographic technique begun in PHOT 110, and explores digital photography as a new visual arts medium. More intensive use of tools and filters in Adobe Photoshop and other art- and photo-related software, advanced camera techniques, and scanning and output methods are included with emphasis on constructing meaning in imagery through digital processes. (Formerly PHOT 93)
Transfer Credit: CSU

PHOT 120
INTRODUCTION TO COLOR SLIDE 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 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 place on experiential field and studio work. (Formerly PHOT 28)
Transfer Credit: CSU

PHOT 122
INTRODUCTION TO COLOR 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 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 124
INTERMEDIATE COLOR PHOTOGRAPHY 2 UNITS
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 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

PHYSICAL EDUCATION

(HPER / Athletics Division)

PHYSICAL EDUCATION PRE-PROFESSIONAL THEORY

PE 100
INTRODUCTION TO PHYSICAL EDUCATION 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
A survey of physical education and allied fields and their significance in the school program with emphasis on the acquisition of leadership skills and knowledge in planning, organizing, presenting and evaluating activities. Career opportunities in physical education and related fields will be surveyed. (Formerly PE 1)
Transfer Credit: CSU; UC

PE 101
SPORTS OFFICIATING FOR MEN'S ACTIVITIES I 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Theory and practice are combined in a study of the organization and technique of officiating football, basketball and other athletic activities normally conducted during the fall semester. (Formerly PE 2. 1)
Transfer Credit: CSU; UC

PE 102
SPORTS OFFICIATING FOR MEN'S ACTIVITIES II **2 UNITS**
Class hours: 2 lecture
Prerequisite: None.
Theory and practice are combined in a study of the organization and techniques of officiating baseball, track and field, and other athletic activities normally conducted during the spring semester. (Formerly PE 2. 2)
Transfer Credit: CSU; UC

PE 103
SPORTS OFFICIATING FOR WOMEN'S ACTIVITIES I **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 Volleyball, Basketball, Field Hockey and Flag Football. (Formerly PE 3. 1)
Transfer Credit: CSU; UC

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; UC

PE 105
STUDENT ATHLETES IN SOCIETY **2 UNITS**
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides students with an analysis and interpretation of issues affecting student athletes in past and present societies. Physiological, sociological, and psychological aspects of student athletes as related to sport and education will be covered. Students will plan for future career opportunities. (Formerly PE 4)
Transfer Credit: CSU

PE 106
CREATIVE MOVEMENT FOR CHILDREN **2 UNITS**
Class hours: 3 hrs lecture/activity
Prerequisite: None.
This course will focus on providing the elementary school teacher with insights into the psychological, sociological, and physiological development of children in pre-school through grade six, and on learning games, activities, and rhythms appropriate for the various age groups. Attention will also be given to the organization and management of physical education classes. (Formerly PE 5)
Transfer Credit: CSU

PE 107
INTRODUCTION TO ATHLETIC TRAINING **3 UNITS**
Class hours:3 lecture
Prerequisite:None.
This course provides instruction in the prevention, assessment, management, and reconditioning of athletic injuries. Taping and bandaging, protective padding, and modalities used for treatment will be presented. (Formerly PE 7. 1)
Transfer Credit: CSU; UC

PE 255
PROGRAMS AND PRINCIPLES OF CONDITIONING **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will provide the student with basic knowledge and principles related to exercise prescription. Students will develop the skills necessary to design and implement training programs as they relate to the components of fitness. Safeguards and effectiveness for all levels of fitness will be addressed.
Transfer Credit: CSU

PE 260
ATHLETIC INJURY ASSESSMENT AND RECONDITIONING **2 UNITS**
Class hours: 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 PRE-PROFESSIONAL ACTIVITIES

PE 108
PROFESSIONAL ACTIVITIES FOR MEN'S SPORTS I **3 UNITS**
Class hours: 5 hrs lecture/activity
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 110
PROFESSIONAL ACTIVITIES FOR MEN'S SPORTS II **3 UNITS**
Class hours: 5 hrs lecture/activity
Prerequisite: None.
Emphasis will be on the theory and practice of baseball and track. The course presents the fundamental knowledge of the sports through techniques of lecture, discussion, and practice. (Formerly PE 10. 2)
Transfer Credit: CSU; UC

PE 111
PROFESSIONAL ACTIVITIES FOR MEN'S SPORTS III **2 UNITS**
Class hours: 4 activity
Prerequisite: None.
This course is designed to offer physical education majors experience in gymnastics and tumbling. (Formerly PE 10. 3)
Transfer Credit: CSU; UC

PE 112
THEORY OF FOOTBALL 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: A basic understanding of the rules used in tackle football; enrollment in PE 210 (Intercollegiate Football).
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 113
PROFESSIONAL ACTIVITIES FOR CO-ED SPORTS I 3 UNITS
Class hours: 5 hrs lecture/activity
Prerequisite: PE 150A or equivalent with a grade of Credit or "C" or higher.
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

PE 114
PROFESSIONAL ACTIVITIES FOR CO-ED SPORTS II 2 UNITS
Class hours: 4 activity
Prerequisite: None.
Instruction and practice in fundamental skills necessary for successful performance including leadership, knowledge, strategy and theory of tennis and golf. Required of all physical education, recreation and recreation aide majors. (Formerly PE 12. 2)
Transfer Credit: CSU; UC

PE 115
PROFESSIONAL ACTIVITIES FOR CO-ED DANCE FUNDAMENTALS III 2 UNITS
Class hours: 4 activity
Prerequisite: None.
This course is designed to acquaint physical education, recreation and recreation aide majors with fundamental social and folk dances. The class provides opportunities for developing the performance skills necessary as preparation for teaching, and also covers basic teaching techniques. Required of all physical education, recreation and recreation aide majors. (Formerly PE 12. 4)
Transfer Credit: CSU; UC

PE 116
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

PE 119
PROFESSIONAL ACTIVITIES FOR WOMEN'S SPORTS III 2 UNITS
Class hours: 4 activity
Prerequisite: None.
This course was designed to acquaint physical education majors with tumbling and gymnastics. It provides opportunity for developing acceptable performance as preparation for techniques of teaching. (Formerly PE 14. 3)
Transfer Credit: CSU; UC

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: 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
Class hours: 4 lab (17 weeks)
Prerequisite:None.
Corequisite: None.
Recommendation: None.
This course is designed to provide students the individualized opportunity to acquire and practice the dance skills necessary for participation in dance concerts, local and regional dance festivals and choreography competitions. (Formerly PE 46.5)

PE 125
WATER SAFETY INSTRUCTOR (WSI) 2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: PE 150B or equivalent, 17 years of age or older and CPR card. Competence in fundamentals of backstroke, sidestroke, breaststroke, crawl and diving.
This course is offered with the authorization of the American Red Cross to provide students with Instructor Candidate Training (ICT), along with the Water Safety Instructor (WSI). It is a comprehensive analysis of principles of movement, organizational strategies utilized in presenting aquatic activities and advanced swimming skills. It also includes an opportunity to qualify for the American Red Cross Water Safety Instructor certification. This course may be taken 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 align-

ment. Relaxation techniques and stretching improve general wellness as they become part of lifestyle. This course may be taken for a maximum of 2 units. (Formerly PE 96. 1/PE 30. 2)
Transfer Credit: CSU; UC

PE 131
WALKING FOR FITNESS **1 UNIT**
Class hours: 2 lab
Prerequisite:None.
Corequisite:None.
Recommendation:Medical examination.
This course will emphasize instruction and practice of walking techniques and knowledge of aerobic conditioning. This course may be taken for a maximum of 2 units. (Formerly PE 30. 4)
Transfer Credit: CSU; UC

PE 132A
AEROBIC ACTIVITIES (LOW IMPACT) **2 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 and lectures in the areas of basic nutrition, body composition, posture analysis and principles of correct exercise. This course may be taken for a maximum of 4 units. (Formerly PE 33. 1)
Transfer Credit: CSU; UC

PE 132B
AEROBIC ACTIVITIES II **2 UNITS**
Class hours:1 lecture/2 hours of activity
Prerequisite:PE 132A or equivalent with a grade of Credit or "C" or higher.
This course is designed to meet the needs of students who want further practical instruction in ways to improve their cardiovascular endurance and flexibility through various aerobic activities and stretching movements and lectures in the areas of basic nutrition, body composition, posture analysis and principles of correct exercise. Higher intensity and longer duration of the activity of the aerobic section is the main difference between Aerobics I and II. This course may be taken for a maximum of 4 units. (Formerly PE 33. 2)
Transfer Credit: CSU; UC

PE 133
STEP AEROBICS **2 UNITS**
Class hours: 1 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed as a contemporary workout to improve each participant's strength and cardiovascular fitness level through steady-state stepping movements that will improve health. Students will be exposed to a graduated, continuous system of rhythmic stepping at various platform heights, emphasizing strength, flexibility, and endurance. The class will include proper body alignment and mechanics, basic nutrition, injury prevention, strength training, and personal assessment. This course may be taken for a maximum of 4 units. (Formerly PE 69. 8/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: 2 activity
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: 4 activity
Prerequisite: PE 135A or equivalent with a grade of Credit or "C" or higher.
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 140
FITNESS AND WELLNESS **2 UNITS**
Class hours:1 lecture/2 lab
Prerequisite:None.
Lecture topics will include exercise, nutrition, coronary heart disease, and stress management. Exercise lab includes pre and post assessment of each student's fitness components:body fat, cholesterol level, flexibility, cardiorespiratory fitness, and muscular strength and endurance. Individualized exercise prescription is provided for each student to improve his/her fitness components. Progress is monitored throughout the semester. This course may be taken for a maximum of 4 units. (Formerly PE 30.5)
Transfer Credit: CSU; UC

PE 141
FITNESS AND WELLNESS **3 UNITS**
Class hours:1 lecture/4 lab
Prerequisite:None.
Lecture topics include exercise, nutrition, coronary heart disease, and stress management. Exercise lab includes pre and post assessment of each student's fitness components:body fat, cholesterol level, flexibility, cardiorespiratory fitness, and muscular strength and endurance. Individualized exercise prescription is provided for each student to improve his/her fitness components. Progress is monitored throughout the semester. This course may be taken for a maximum of 6 units. (Formerly PE 30. 6)
Transfer Credit: CSU; UC

PE 142
FITNESS AND WELLNESS FOR OLDER ADULTS 2 UNITS
Class hours: 1 lecture/2 lab
Prerequisite:Medical Clearance from Physician.
This course is designed for older adults and includes an exercise program consisting of mild aerobics, stretching, weight lifting, bicycle ergometer riding, water exercises and jog walking. Testing is provided to determine a physical assessment of the individual for fat content, 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: 2 lab
Prerequisite:PE 140 or PE 141 or PE 142 or equivalent with a grade of Credit or "C" or higher.
This course is designed as an exercise program consisting of aerobics, stretching, weight training, bicycle ergometer, arm ergometer, water exercise and running activities. Testing will be provided to determine physical assessment and improvement in the areas of flexibility, strength, endurance and aerobic fitness. 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:PE 140 or PE 141 or A&P 130 or A&P 200 or A&P 201 or equivalent with a grade of Credit or "C" or higher.
This course offers individuals a background in working with various instruments used in exercise testing. Discussions will include the scientific bases for the exercise tests. (Formerly PE 69. 7/PE 30. 9)
Transfer Credit: CSU; UC

PE 150A
SWIMMING, BEGINNING 1 UNIT
Class hours: 2 activity
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: 4 activity
Prerequisite: PE 150A or equivalent with a grade of Credit or "C" or higher.
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: 2 activity
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 152
TUMBLING AND STUNTS, BEGINNING 1 UNIT
Class hours: 2 activity
Prerequisite: None.
Emphasis will be on beginning skills necessary for basic tumbling and stunts. Instruction will be given in safety and use of equipment and an appreciation of this activity and its various forms of competition and participation. This course may be taken for a maximum of 4 units. (Formerly PE 32.1)
Transfer Credit: CSU; UC

PE 153A
BACKPACKING, BEGINNING 2 UNITS
Class hours: 1 lecture/2 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 trip or one 9 day field trip.
Prerequisite:PE 153A or equivalent with a grade of Credit or "C" or higher.
This course is designed to provide the student with advanced skills and knowledge used in extensive all-season, cross-country backpacking. Emphasis will be placed on survival and navigational skills. Two trips of 4 1/2 days (or one 9-day trip in summer session) will be required. Students will be expected to furnish their own backpacking equipment. This course may be taken for a maximum of 4 units. (Formerly PE 40. 6)
Transfer Credit: CSU; UC

PE 154A
BADMINTON, BEGINNING 1 UNIT
Class hours: 2 lab
Prerequisite:None.
Emphasis will be on fundamental strokes and court techniques for singles, doubles, and mixed doubles. This course may be taken for a maximum of 2 units. (Formerly PE 40.7)
Transfer Credit: CSU; UC

PE 154B
BADMINTON, INTERMEDIATE / ADVANCED 2 UNITS
Class hours: 4 lab
Prerequisite:PE 154A or equivalent with a grade of Credit or "C" or higher.
This course is designed for badminton players wishing to improve skills and techniques. Emphasis will be on improving form and court strategy in offensive and defensive play. Intraclass competition will be held. This course may be taken for a maximum of 4 units. (Formerly PE 40. 9)
Transfer Credit: CSU; UC

PE 155A
BOWLING, BEGINNING 1 UNIT
Class hours: 2 activity
Prerequisite: None.
The fundamental theory, techniques, rules, etiquette and scoring of bowling will be emphasized. This course may be taken for a maximum of 2 units. (Formerly PE 40. 13)
Transfer Credit: CSU; UC

PE 155B
BOWLING INTERMEDIATE / ADVANCED **1 UNIT**
Class hours: 2 activity
Prerequisite: PE 155A or equivalent with a grade of Credit or "C" or higher.
This course is designed to help the student improve their skill in bowling by correction of individual faults, advanced lane adjustment techniques and opportunity for league competition in the class. Additional areas of knowledge will include league organization and psychology of competition. This course may be taken for a maximum of 4 units. (Formerly PE 40. 15)
Transfer Credit: CSU; UC

PE 156A
GOLF, BEGINNING **1 UNIT**
Class hours: 2 activity
Prerequisite: None.
This course is designed to teach fundamental techniques, basic rules, and proper course etiquette of the game of golf. This course may be taken for a maximum of 2 units. (Formerly PE 40. 16)
Transfer Credit: CSU; UC

PE 156B
GOLF, INTERMEDIATE / ADVANCED **2 UNITS**
Class hours: 4 activity
Prerequisite: PE 156A or equivalent with a grade of Credit or "C" or higher .
This course is designed to present advanced techniques, rules, and etiquette of the game of golf. This course may be taken for a maximum of 4 units. (Formerly PE 40. 18)
Transfer Credit: CSU; UC

PE 156C
GOLF: ADVANCED STROKE DEVELOPMENT AND COURSE PLAY **2 UNITS**
Class hours: 4 lab
Prerequisite:None.
Corequisite:None.
Recommendation:PE 156A or PE 156B or equivalent with a grade of Credit or "C" or higher.
This course provides group and individualized instruction to develop and improve the more technical and advanced golf strokes. Specialized strokes include those used in sand traps, side hill and down hill lies, special consideration shots to use off the tee, and advanced putting techniques. Golf playing strategy for use on the course will be presented with emphasis on specific words and course positions in stroke play. PGA rules and etiquette will be emphasized. Students will play competitive golf in class and outside tournaments. This course may be taken for a maximum of 4 units. (Formerly PE 40. 17)
Transfer Credit: CSU; UC

PE 157
HANDBALL, BEGINNING **1 UNIT**
Class hours: 2 activity
Prerequisite: None.
The fundamental techniques and rules of handball will be emphasized. Games of singles, doubles, and cut-throat will be played. Both indoor and outdoor courts will be utilized. This course may be taken for a maximum of 4 units. (Formerly PE 40. 19)
Transfer Credit: CSU; UC

PE 158A
RAQUETBALL, BEGINNING **1 UNIT**
Class hours: 2 activity
Prerequisite: None.
The emphasis will be on fundamental strokes, techniques of playing, rules and strategy of racquetball for doubles, singles, and "cut-throat" play. This course may be taken for a maximum of 2 units. (Formerly PE 40. 25)
Transfer Credit: CSU; UC

PE 158B
RACQUETBALL, INTERMEDIATE / ADVANCED **2 UNITS**
Class hours: 4 activity
Prerequisite: PE 158A or equivalent with a grade of Credit or "C" or higher.
Fundamental techniques and rules of racquetball will be reviewed with major emphasis on strategies and offensive and defensive deployments in singles and doubles. This course may be taken for a maximum of 4 units. (Formerly PE 40. 27)
Transfer Credit: CSU; UC

PE 159A
TENNIS, BEGINNING **1 UNIT**
Class hours: 2 activity
Prerequisite: None.
Fundamental stroke and court technique for singles and doubles. This course may be taken for a maximum of 2 units. (Formerly PE 40. 34)
Transfer Credit: CSU; UC

PE 159B
TENNIS, INTERMEDIATE / ADVANCED **2 UNITS**
Class hours: 4 activity
Prerequisite: PE 159A or equivalent with a grade of Credit or "C" or higher.
This course is designed for those players wishing to increase skills in tennis. An emphasis will be on improvement of form, strokes, and serves. Intra-class competition will be held. This course may be taken for a maximum of 4 units. (Formerly PE 40. 36)
Transfer Credit: CSU; UC

PE 160
SELF DEFENSE FOR WOMEN **1 UNIT**
Class hours: 2 activity
Prerequisite: None.
A course designed to provide women with specific attitudes, knowledge and skills useful in self defense. This course may be taken for a maximum of 4 units. (Formerly PE 60. 4)
Transfer Credit: CSU; UC

PE 170
WATER POLO **2 UNITS**
Class hours:1 lecture/3 lab
Prerequisite:Ability to swim 200 yards under 5 minutes.
During this course, the student will learn the skills of water polo, which include physical skill development, conditioning, game strategy and terminology. This course may be taken for a maximum of 8 units. (Formerly PE 20. 7)
Transfer Credit: CSU; UC

PE 171A
SOFTBALL **1 UNIT**
Class hours: 2 activity
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: 4 activity
Prerequisite: PE 171A or equivalent with a grade of Credit or "C" or higher.
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 independently analyze their own performance. 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: 2 activity
Prerequisite: None.
This course is designed to provide students with the knowledge and practical skills necessary to effectively participate in slow-pitch softball. In slow-pitch softball the ball is thrown slowly, traveling in an arc. This course may be taken for a maximum of 2 units. (Formerly PE 40. 31)
Transfer Credit: CSU; UC

PE 172A
VOLLEYBALL, BEGINNING **1 UNIT**
Class hours: 2 activity
Prerequisite: None.
This course is designed to develop the students' understanding of the basic fundamentals of volleyball by instruction and practice in setting, passing, spiking and team play. Six-player co-ed teams will play in various types of tournaments. 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: 4 activity
Prerequisite: PE 172A or equivalent with a grade of Credit or "C" or higher.
A course designed for students wishing to improve form 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: 2 activity
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: 4 activity
Prerequisite: PE 175A or equivalent with a grade of Credit or "C" or higher.
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
BASKETBALL **1 UNIT**
Class hours: 2 activity
Prerequisite: None.
Instruction and practice in shooting, passing, and offensive play, rebounding, 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: 4 activity
Prerequisite:PE 176A with a grade of Credit or "C" or higher.
The course is designed to improve individual techniques for basketball 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. 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: 4 activity
Prerequisite: PE 177 or equivalent with a grade of Credit or "C" or higher.
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: 2 activity
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: 4 activity
Prerequisite: PE 179A or equivalent with a grade of Credit or "C" or higher.
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 8 units. (Formerly PE 45. 1)
Transfer Credit: CSU; UC

PE 182A
DANCE, MODERN, BEGINNING **2 UNITS**
Class hours: 4 activity
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 8 units. (Formerly PE 45. 10)
Transfer Credit: CSU; UC

PE 182B
DANCE, MODERN, INTERMEDIATE **2 UNITS**
Class hours: 4 activity
Prerequisite: PE 182A or equivalent with a grade of Credit or "C" or higher.
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 8 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 maximum 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: 4 activity
Prerequisite: None.
Students will study basics of ballet terminology and technique. Emphasis is on body alignment, coordination and musicality. This course may be taken for a maximum of 8 units. (Formerly PE 45. 17)
Transfer Credit: CSU; UC

PE 186B
INTERMEDIATE BALLET **2 UNITS**
Class hours: 4 activity
Prerequisite: PE 186A or equivalent with a grade of Credit or "C" or higher.
Students will study the advanced terminology and technique of classical ballet. This course may be taken for a maximum of 8 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 Kineseography 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

PE 201
BASEBALL OFF-SEASON CONDITIONING **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 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: 4 Lab
Prerequisite: None.
Corequisite: PE 178.
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 (Not degree applicable)
TENNIS CONDITIONING 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Corequisite:None.
This class will provide training and drills necessary to develop skills and knowledge to compete on a college tennis team. Physical conditioning, aerobics, strength and agility drills will be used. This course may be taken for a maximum of 4 units. (Formerly PE 40. 41)

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

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.
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 (Spring only)
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 (Fall only)
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

PE 204
BASKETBALL, WOMEN 3 UNITS
Class hours: 10 hrs per week - Daily practice (Fall only)
Prerequisite: None.
This course will include training for intercollegiate competition in women's basketball. It includes daily practice of two hours plus an intercollegiate game schedule. Conditioning for competition will be stressed. This course may be taken for a maximum of 12 units. (Formerly PE 73. 2)
Transfer Credit: CSU; UC

PE 206
CROSS COUNTRY, MEN 3 UNITS
Class hours: 10 hrs per week - Daily practice (Fall only)
Prerequisite: None.
This course is designed to develop the student for intercollegiate competition in cross country running. Proper warm-up exercises and conditioning will be emphasized. This course may be taken for a maximum of 12 units. (Formerly PE 74. 1)
Transfer Credit: CSU; UC

PE 208
CROSS COUNTRY, WOMEN **3 UNITS**
Class hours: 10 hrs per week -
Daily practice (Fall only)
Prerequisite: None.
This course is designed to provide training for women in intercollegiate competition in cross country. This course may be taken for a maximum of 12 units. (Formerly PE 74. 2)
Transfer Credit: CSU; UC

PE 210
FOOTBALL, MEN **3 UNITS**
Class hours: 10 hrs per week -
Daily practice (Fall only)
Prerequisite: None.
This course is designed to provide training for intercollegiate competition in football. Individual skill techniques, good sportsmanship, team play, and strategy will be emphasized. This course may be taken for a maximum of 12 units. (Formerly PE 75)
Transfer Credit: CSU; UC

PE 213
INTERCOLLEGIATE GOLF **3 UNITS**
Class hours:10 hours activity
Daily Practice (Spring only)
Prerequisite:None.
This class prepares students for intercollegiate competition in golf and gives them an opportunity to participate in this competition. This course may be taken for a maximum of 12 units. (Formerly PE 76)
Transfer Credit: CSU; UC

PE 217
SOCCER, MEN **3 UNITS**
Class hours: 10 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
Training for intercollegiate competition in soccer. This course may be taken for a maximum of 12 units. (Formerly PE 80. 1)
Transfer Credit: CSU; UC

PE 219
SOCCER, WOMEN **3 UNITS**
Class hours: 10 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
Training for intercollegiate competition in soccer. This course may be taken for a maximum of 12 units. (Formerly PE 80. 2)
Transfer Credit: CSU; UC

PE 221
SOFTBALL, WOMEN **3 UNITS**
Class hours: 10 hrs per week -
Daily Practice (Spring only)
Prerequisite: None.
Training for intercollegiate competition in women's softball. This course may be taken for a maximum of 12 units. (Formerly PE 81)
Transfer Credit: CSU; UC

PE 223
SWIMMING, MEN **3 UNITS**
Class hours: 10 hrs per week -
Daily practice (Spring only)
Prerequisite: None.
Training for intercollegiate competition in swimming. This course may be taken for a maximum of 12 units. (Formerly PE 82. 1)
Transfer Credit: CSU; UC

PE 225
SWIMMING, WOMEN **3 UNITS**
Class hours: 10 hrs per week -
Daily practice (Spring only)
Prerequisite: None.
This course is designed to provide training for women in intercollegiate competitive swimming. Emphasis will be on conditioning and stroke analysis. This course may be taken for a maximum of 12 units. (Formerly PE 82. 2)
Transfer Credit: CSU; UC

PE 227
TENNIS, MEN **3 UNITS**
Class hours: 10 hrs per week -
Daily practice (Spring only)
Prerequisite: None.
This course is designed to provide training for intercollegiate competition in tennis for men. Conditioning, skills, techniques, court strategy, and rules of play will be emphasized. This course may be taken for a maximum of 12 units. (Formerly PE 83. 1)
Transfer Credit: CSU; UC

PE 229
TENNIS, WOMEN **3 UNITS**
Class hours: 10 hrs per week -
Daily practice (Spring only)
Prerequisite: None.
This course will prepare students for competition in women's tennis. Emphasis will be on conditioning and learning competitive strategy and techniques. This course may be taken for a maximum of 12 units. (Formerly PE 83. 2)
Transfer Credit: CSU; UC

PE 231
TRACK AND FIELD, MEN **3 UNITS**
Class hours: 10 hrs per week -
Daily practice (Spring only)
Prerequisite: None.
This course is designed to develop the student for intercollegiate competition in track and field events. Individual techniques and skills for different events will be emphasized. Proper warm-up exercises for different events will be stressed. This course may be taken for a maximum of 12 units. (Formerly PE 84. 1)
Transfer Credit: CSU; UC

PE 233
TRACK AND FIELD, WOMEN **3 UNITS**
Class hours: 10 hrs per week -
Daily practice (Spring only)
Prerequisite: None.
This course is designed to develop the student for intercollegiate competition in Track and Field events. Individual techniques and skills for different events will be emphasized. Proper warm-up exercises for different events will be stressed. This course may be taken for a maximum of 12 units. (Formerly PE 84. 2)
Transfer Credit: CSU; UC

PE 235
VOLLEYBALL, WOMEN **3 UNITS**
Class hours: 10 hrs per week -
Daily Practice (Fall only)
Prerequisite: None.
This course is designed to provide training for intercollegiate competition in women's volleyball. It involves daily practice of two hours plus an intercollegiate match schedule. Conditioning for tournament play will be stressed. This course may be taken for a maximum of 12 units. (Formerly PE 85. 2)
Transfer Credit: CSU; UC

PE 239
WATER POLO - MEN **3 UNITS**
Class hours: 10 hrs per week -
Daily practice (Fall only)
Prerequisite: 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 241
WATER POLO - WOMEN **3 UNITS**
Class hours: 10 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
Training for intercollegiate competition in water polo. This course may be taken for a maximum of 12 units. (Formerly PE 86. 1)
Transfer Credit: CSU; UC

PE 243
WRESTLING **3 UNITS**
Class hours: 10 hrs per week - Daily practice (Fall only)
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 THE DISABLED **1 UNIT**
Class hours: 2 lab
Prerequisite:None.
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
AEROBIC ACTIVITIES FOR THE DISABLED **1 UNIT**
Class hours: 2 lab
Prerequisite:None.
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
CIRCUIT WEIGHT TRAINING FOR THE DISABLED **1 UNIT**
Class hours: 2 lab
Prerequisite:None.
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
SWIMMING FOR THE DISABLED **1 UNIT**
Class hours: 2 lab
Prerequisite:None.
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: 2 lab
Prerequisite:None.
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

PHYSICAL THERAPIST ASSISTANT

(Health Occupations Division)

PTA 110
INTRODUCTION TO PHYSICAL THERAPY **4 UNITS**
Class hours: 3 lecture, 3 lab (Fall only)
Prerequisite: A&P 130 or equivalent with a grade of Credit or "C" or higher; acceptance into the Physical Therapist Assistant Program.
This course will introduce the student to the history and ethics of physical therapy as they relate to the health care system; the development of the team approach and the philosophy of rehabilitation; the use of treatment modalities; terminology and measurement of joint motion; body mechanics and proper handling of patients; vital signs and their relationship to treatment programs. (Formerly PTA 10)
Transfer Credit: CSU

PTA 120
KINESIOLOGY **4 UNITS**
Class hours: 3 lecture, 3 lab (Fall only)
Prerequisite: A&P 130 or equivalent with a grade of Credit or "C" or higher.
Corequisite: PTA 110.
This course is the study of biomechanical principles of human movement and locomotion including specific kinesiological functions of muscles and muscle groups, characteristics of normal posture and ambulation, and an introduction to the clinical manifestations of muscle dysfunction. Laboratory hours will be used for goniometry, gait observation, muscle action application, and practice. (Formerly PTA 20)
Transfer Credit: CSU

PTA 125
PATHOLOGY **3 UNITS**
Class hours: 3 lecture (Spring only)
Prerequisite: PTA 110 or equivalent with a grade of Credit or "C" or higher, current CPR Card - Course C.
Corequisite: PTA 126.
This course will include introduction to and instruction in observation of common pathological conditions. Emphasis will be placed on the following systems: musculoskeletal, circulatory, respiratory, gastrointestinal, and genitourinary. (Formerly PTA 25)
Transfer Credit: CSU

PTA 126
CLINICAL PRACTICUM I 4 UNITS
Class hours: 221 variable semester lab hours
Prerequisite: None.
Corequisite: PTA 125.
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.
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 (Fall only)
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 (Fall only)
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

PTA 235
NEUROLOGY 3 UNITS
Class hours: 3 lecture (Spring only)
Prerequisite: PTA 120 or equivalent with a grade of Credit or "C" or higher.
This course is designed to increase the student's knowledge in the anatomy and physiology of the nervous system. Information regarding the central, peripheral and autonomic systems is provided. Emphasis will be placed on the clinical manifestations of disease or injury to the nervous system as it relates to clinical problems encountered in physical therapy. (Formerly PTA 35)
Transfer Credit: CSU

PTA 236
CLINICAL PRACTICUM II 4 UNITS
Class hours: 221 variable semester lab hours
Prerequisite: PTA 126 or equivalent with a grade of Credit or "C" or higher.
Corequisite: PTA 230.
This course is designed to teach the student the necessary treatment skills for physical therapy patient care. These skills will include active, passive and resistive exercise programs, as well as continued practice in heat and cold modalities application, gait and transfer training. Students will also learn fundamental procedures for clinical education from direct teaching through evaluation of learning. Laboratory experience involves training in one or more physical therapy settings as designated by the instructor. Student uniforms are required. This course is offered on a credit/no credit basis only. (Formerly PTA 35. 10)
Transfer Credit: CSU

PTA 240
ACTIVITIES OF DAILY LIVING 2 UNITS
Class hours: 2 lecture
Prerequisite: PTA 230 and PTA 236 or equivalent with grades of Credit or "C" or higher.
Corequisite: PTA 246.
This course will present instruction in the functional rehabilitation of the disabled. Emphasis will be on understanding and utilization of the physical therapy evaluation for implementation of treatment programs. This course will present clinical instruction activities of daily living training techniques, wheelchair fitting, Jobst measurement and professional presentations. (Formerly PTA 40)
Transfer Credit: CSU

PTA 245
ADVANCED MODALITIES 3 UNITS
Class hours: 2 lecture/3 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 out-patient 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 labwork. (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 11)
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 102 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

(Technology 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 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 of plastic repairs. Related technical information and demonstrations are presented concerning plastic identification, materials, and processes of repair. The PMT 63L specialty lab class is recommended to perform the hands-on training and repairs. (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 is a specialty course for the advanced plastics student or individuals employed in the plastics industry that wish to further their skills and knowledge of plastics. Laboratory experience will continue to stress major areas of specialization selected by the student, including: materials, process applications, and equipment. (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 lami-

nated 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 15 hours of employment per week for Plastics work experience 73 or 20 hours of employment per week for Plastics work experience 74. The employment must be in a job related to the student's educational goal.
Corequisite:(1) Enrollment in the Plastics vocational program with 7 or more units including occupational work experience.
Work experience/career internship provides the opportunity for Plastics Manufacturing Technology students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to the major and job skills must be completed on the job/training site. These courses may be taken 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 will introduce the student to the fundamentals and principles of hydraulics and pneumatics as they relate to industrial manufacturing and equipment. Applications of each will be explored. The design and understanding of simple circuits and systems in the laboratory will be examined. (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 will provide students with theory and "hands-on" exposure to fabrication methods with "high-tech" materials. Areas of concentration will include composite structures, material choices, design of composite structures, surface bonding, fastener installation, inspection processes and approved repair methods. Fabrication, safety procedures, and material handling are also covered. (Formerly PMT 35)

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 moldmaking and knowledge of the latest technologies used for mold designing and mold fabrication, including the use of computer programs. Definitions of complex types of plastic injection molds, mathematical solutions of plastic part requirements, computer-generated Electrical Discharge Machining (EDM) electrodes and computer-generated template designs, and surface polishing will be covered. (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 57
SURVEY OF PLASTICS **1.5 UNITS**
Class hours: 3 lecture (9 weeks)
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces students to a basic understanding of occupations, manufacturing processes and materials used within the plastics industry. Students seeking employment and furthering their knowledge of plastics will benefit from a variety of plant tours, guest speakers, and information in areas of interest within the plastics manufacturing industry. (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 provides the student with details that apply to application of the extrusion process. The necessary equipment and materials and their selection are covered in depth. Current industry trends in materials handling, machine operation and how these relate to the manufacturing process are emphasized. (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 (fiberglass chopper gun, gel-coat spray gun)

is stressed. Other areas explored are mold laminating, repair, and proper use of resins and fillers. Mixing of resins and safety procedures are emphasized. This course may be taken for a maximum of 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, or appropriate work experience.
This course will introduce the student to the fundamentals and principles of hydraulics and pneumatics as they relate to plastics and machine tool equipment. Applications of each will be explored, as well as the design of simple circuits and systems in the laboratory. (Formerly PMT 23)

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 material 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)

PMT 72
TOOLING FOR PLASTICS 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Recommendation: PMT 61 or PMT 67 or PMT 70 or equivalent with a grade of Credit or "C" or higher.
This course covers basic tooling concepts and materials for making various plastic composite molds. These include laminated, cast and high temperature plastic tools as well as plaster tooling. Design recommendations, physical properties data, repair procedures and techniques are discussed. (Formerly PMT 46)

PMT 100
PLASTICS 1 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite:None.
This course provides knowledge of materials and processes used in the field of plastic manufacturing today. An overview of plastic technology and application of production processes, as well as fabrication methods are covered. This course includes molding, forming, reinforced materials, bonding, laminating, and finishing techniques, and plastic materials identification. (Formerly PMT 1)
Transfer Credit: CSU

PMT 221
MODELMAKING 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces students to techniques and various materials used in commercial modelmaking. Areas of emphasis include conventional and current trends, tools and materials, dimensional

accuracy, and stylistic value. Hands-on fabrication of commerical models is also covered. (Formerly PMT 47)
Transfer Credit: CSU

POLITICAL SCIENCE

(Humanities / Social Sciences Division)

POL 90
INTERNET STRATEGIES FOR CIVIC COMMUNICATION **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course, using traditional and online techniques looks at the growing use of the Internet by public agencies, government relations departments, non-profit and community-based organizations, and political/civic campaigns, and civic institutions. Students will examine the effects of Internet on society as well as the economic impact of Internet on political, public and civic institutions. Strategic issues related to aligning Internet solutions and overall institutional objectives will be addressed including Internet tools for fundraising, targeted communication, volunteer recruitment, polling, management, narrow casting and online collaboration. (Formerly POL 15)

POL 101 (CAN GOVT 2)
AMERICAN POLITICAL INSTITUTIONS **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Credit or "C" or higher and satisfactory completion of the Reading Placement Process or READ 43 or equivalent with a grade of Credit or "C" or higher.
This course is a study of national, state and local government, including the national and state constitutions. It emphasizes the rights and responsibilities of citizens and political processes and issues facing government. Emphasis will be given to practical policy formulation at all levels. (Formerly POL 5)
Transfer Credit: CSU; UC

POL 110
CALIFORNIA STATE AND LOCAL GOVERNMENT **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 and satisfactory completion of the Reading Placement Process or READ 43 or equivalent with a grade of Credit or "C" or higher.
This course stresses the study of California state and local government (counties, cities, and special districts) and California party politics, including the study of the California constitution, intergovernmental relations, regional governments, and urban politics and problems. This course is designed to make available to students concepts, information, and skills which will enable them to better understand the political and governmental systems in which citizens function. (Formerly POL 18)
Transfer Credit: CSU

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. The class is intended for college transfer students, especially political science majors. (Formerly POL 1)
Transfer Credit: CSU; UC

POL 210
INTERNATIONAL RELATIONS **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher and satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of Credit or "C" or higher.
This course is a study of basic concepts, theories, and principles of international politics. Emphasis shall be placed on an examination of contemporary world affairs including the importance of nationalism, imperialism, ideology, alliance systems, the rise of the developing nations and the nature of international organizations. Specific case studies shall be examined to illustrate the various principles of international relations. (Formerly POL 10)
Transfer Credit: CSU; UC

POL 220
COMPARATIVE GOVERNMENT **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory score on the English Placement Process or ENGL 52 with a grade of Credit or "C" or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or "C" or higher.
This course includes a study of comparative systems of government, differing ideologies, and current political problems. Analyses of revolutionary forces in the 20th century are conducted for political insight and understanding. (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 measure-

ment 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 probabilities 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 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 (CAN PSY 6)
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 (CAN PSY 8)
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

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)

READ 54
ADVANCED READING **3 UNITS**
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the Reading Placement Process or READ 43 or equivalent with a grade of Credit or "C" or higher.
This course is designed to improve literal, interpretive, critical comprehension, and vocabulary skills. Emphasis will be on structured vocabulary development and college-level reading skills.

READ 100
SPEED READING METHODS AND APPLICATIONS **3 UNITS**
Class hours:3 lecture
Prerequisite:None.
This course is designed to increase reading speed and comprehension in college-level material. Emphasis is placed on developing an improved reading method through learning rapid reading techniques, gaining flexibility in adjusting reading speed to suit purpose for reading and difficulty of the material, overcoming habits of regression and subvocalization, recognizing and using basic writing structures and literary elements as aids to comprehension in depth, and mastering speed study techniques and speed research techniques. All methods and techniques are applied to various types of college-level reading materials. (Formerly READ 6)
Transfer Credit: CSU

READ 100A
SPEED READING: METHODS 1.5 UNITS
Class hours:3 lecture (9 weeks)
Prerequisite:None.
This course is identical to the first half of Reading 100. It is designed to increase reading speed by developing an improved reading method through learning rapid reading techniques, gaining flexibility in adjusting reading speed to suit purpose for reading and difficulty of the material, overcoming habits of regression and subvocalization, recognizing basic writing structures and literary elements as aids to comprehension. (Formerly READ 6. 1)
Transfer Credit: CSU

READ 100B
SPEED READING: APPLICATIONS 1.5 UNITS
Class hours:3 lecture (9 weeks)
Prerequisite:READ 100A or equivalent with a grade of Credit or "C" or higher.
This course is identical to the second half of Reading 100. It is designed to improve comprehension while reading rapidly by utilizing knowledge of basic writing structures and literary elements as aids to comprehension, mastering speed study techniques, and speed research techniques, and applying all methods and techniques learned in Reading 100A to various types of college level reading materials. (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 or higher.
Corequisite:None.
Recommendation:Completion of ENGL 52 or equivalent with a grade of Credit or "C" or higher.
The course focuses on student understanding of the cognitive processes of critical thinking to critical reading in an integrated, interdisciplinary framework. Emphasis is placed on the development of critical thinking, reading, and writing skills with applications in interpretation, analysis, and criticism of academic readings. (Formerly READ 1)
Transfer Credit: CSU

REAL ESTATE

SEE BUSR
(Business Real Estate)

SECRETARIAL (ADMINISTRATIVE, LEGAL, MEDICAL)

SEE BASS
(Business Administrative Support Systems)

SIGN LANGUAGE

(Liberal Arts Division)

SL 48 (Not degree applicable)
INTERMEDIATE II SIGN LANGUAGE 2 UNITS
Class hours: 2 lecture, 1 lab.
Prerequisite: SL 51 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 50
BEGINNING SIGN LANGUAGE 2 UNITS
Class hours: 2 lecture, 1 lab
Prerequisite: None.
The focus of this introductory course is to develop specific skills in sign language for anyone needing to communicate with individuals who have hearing disabilities. The course is designed for those with no signing ability as well as those who have already mastered basic signs, finger spelling and reading signs. This course may be taken for a maximum of 4 units.

SL 51
INTERMEDIATE SIGN LANGUAGE 2 UNITS
Class hours: 2 lecture, 1 lab
Prerequisite: SL 50 or equivalent with a grade of Credit or "C" or higher.
The focus of this course is to increase specific skills in sign language and build vocabulary to further communicate with individuals who have hearing disabilities. This course may be taken for a maximum of 4 units.

SOCIOLOGY

(Humanities / Social Sciences Division)

SOC 101 (CAN SOC 2)
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 (CAN SOC 4)
SOCIAL PROBLEMS **3 UNITS**
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.
This course is a survey of theories, problems, nature, and the dynamics of racism. Power and inequality, prejudice and discrimination and patterns of racial/ethnic relations are examined conceptually and historically, using data from scientific, philosophical, sociopolitical, legal and cultural sources. Models and concepts for positive change will be explored. (Formerly SOC 25)
Transfer Credit: CSU; UC

SOC 215
SOCIOLOGY OF CULTURAL DIVERSITY: CHALLENGE AND CHANGE **3 UNITS**
Class hours: 3 lecture
Prerequisite:None.
Corequisite:None.
Recommendation: None.
This course is designed to create an awareness of, an appreciation of, and a tolerance of diverse cultures. Topics covered will include the nature of culture, world views, customs and mores, views on religion, marriage and the family, children and the elderly, ethnocentrism, stereotyping, the nature of prejudice and discrimination, and social change. (Formerly SOC 8)
Transfer Credit: CSU, UC

SOC 220
INTRODUCTION TO HUMAN SERVICES **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
Recommendation: SOC 101 or PSYC 101 or equivalent with a grade of Credit or "C" or higher is strongly recommended.
Sociology 220 represents an introduction to the purposes, historical context and organizational structure of human services. Emphasis is threefold:the development of human services and related careers in response to situations of individuals or groups who need assistance to live better lives (purpose); the recent history of human services dating from the early 1960s, which is marked by an increased awareness that many people need different kinds of assistance; and the purposes of the organizations that deliver services to clients. (Formerly SOC 20)
Transfer Credit: CSU

SOC 225
CONTEMPORARY SOCIAL ISSUES **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: SOC 101 or equivalent with a grade of Credit or "C" or higher is strongly recommended.
This is a specialized course designed to acquaint the student with major social issues facing the United States and to a limited extent, the world. This course focuses on origins, sustaining causes and possible solution to societal issues. The specific issue will be decided by the course instructor and announced in the Schedule of Classes. This course may be taken for a maximum of 12 units. (Formerly SOC 50)
Transfer Credit: CSU

SOC 230
JUVENILE DELINQUENCY **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: SOC 101 or equivalent with a grade of Credit or "C" or higher is strongly recommended.
This course is a study of adolescents and their lives within contemporary society with emphasis on what is defined and accepted as justice for adolescents in general and delinquents in particular. (Formerly SOC 22)
Transfer Credit: CSU

SOC 250
SOCIOLOGY OF AGING **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
This course represents an introductory survey of the fundamental theories and problems of aging. Using a multicultural approach, the course investigates the sociological, psychological, and physical aspects of the human aging process from middle age to old age. Students are required to investigate why we study aging, to understand the demography of aging as well as the historical and cross-cultural aspects of the aging process in a society. A knowledge of current policies and their effects on the aged population is also desirable. Using and understanding various methodologies is also part of the course. (Formerly SOC 16)
Transfer Credit: CSU, UC

SPANISH

(Liberal Arts Division)

SPAN 101 (CAN SPAN 2)
ELEMENTARY SPANISH **5 UNITS**
Class hours: 5 lecture, 1 hr. lab arr.
Prerequisite: None.
This beginning Spanish course emphasizes listening, speaking, reading, and writing and helps to develop an appreciation of cultural diversity through the study of differences and similarities between cultures. (Formerly SPAN 1)
Transfer Credit: CSU; UC

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 I **3 UNITS**
Class hours: 3 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This beginning course in Spanish language for teacher preparation emphasizes listening, speaking, reading, and writing, and helps to develop an appreciation of cultural diversity through the study of differences and similarities between cultures. (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 2. 1)
Transfer Credit: CSU; UC

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 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 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.

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

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
Prerequisites: 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 therapyfor 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.
This course is designed for students who need an introductory course in oral communication. It will aid them in conversation, small group interaction, identification of speaking purposes, supporting ideas, and listening skills. Videotape is used as an evaluative tool.

SPCH 100
FUNDAMENTALS OF ORAL COMMUNICATION 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent or SPCH 60 or equivalent with a grade of Credit or "C" or higher.
This survey course is an overview of the diversity of human communication. The student develops an understanding of the communication process, the basic elements of improving interpersonal communication, and how to reduce communication apprehension. Also included are leadership 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 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 intercultural communication. It has a culture general approach focusing on variables which influence the communication process. Assignments and activities involve students in the analysis of different communication patterns across cultures and the exploration and practice of methods, skills and techniques for improving intercultural communication.
(Formerly SPCH 11)
Transfer Credit: CSU; UC

SPCH 120 (CAN SPCH 8)
FUNDAMENTALS OF INTERPERSONAL 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 130 (CAN SPCH 4)
FUNDAMENTALS OF SPEAKING 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent or SPCH 60 or equivalent with a grade of Credit or "C" or higher.
This course focuses on the student's communication of ideas and concepts in various audience settings with emphasis on message organization, supporting amplifying materials, and analysis of audience diversity. Videotape is used as an evaluative tool. (Formerly SPCH 2)
Transfer Credit: CSU; UC

SPCH 132 (CAN SPCH 10)
FUNDAMENTALS OF SMALL GROUP COMMUNICATION 3 UNITS
Class hours: 3 lecture and evaluation
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher.
As an introduction to the fundamentals of group discussion, this course focuses on the individual's communication in a small group setting; leadership in groups; group communication norms and processes with emphasis on problem solving and conflict reduction techniques. Videotape is used as an evaluative tool. (Formerly SPCH 7)
Transfer Credit: CSU; UC

SPCH 140
ORAL INTERPRETATION OF LITERATURE 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent or SPCH 60 or equivalent with a grade of Credit or "C" or higher.
This course focuses on the analysis and interpretation of both prose and verse literature,

including study of voice production, structure and content of literature, and techniques of effective oral communication of meaning from the printed page. (Formerly SPCH 4. 1)
Transfer Credit: CSU; UC

SPCH 145
STORYTELLING **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
This course is an introduction to the history of storytelling and the techniques of listening, preparation, and the presentation of stories to various age groups and in various settings. Students acquaint themselves with various literary genres—folk tales, sagas, epics, legends, myths, poetry, and drama. Videotape is used as an evaluative tool. (Formerly SPCH 10)
Transfer Credit: CSU

SPCH 160
PARLIAMENTARY PROCEDURE **1 UNIT**
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 **1 UNIT**
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 **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
This course is designed to provide the student with materials and experience which will give a better understanding of a child's speech and language development. It is recommended for students majoring in elementary education, preschool and special education, speech pathology, and for teaching assistants. (Formerly SPCH 9)
Transfer Credit: CSU

SPCH 235 (CAN SPCH 6)
FUNDAMENTALS OF ARGUMENTATION AND PERSUASION **3 UNITS**
Class hours: 3 lecture and evaluation
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher.
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 8)
Transfer Credit: CSU; UC

SPCH 236
BEGINNING FORENSICS WORKSHOP **1 UNIT**
Class hours: 1 lecture/2 lab
Open entry/open exit
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides students with opportunities to acquire basic oral communication, organizational, and research skills while gaining self-confidence and reducing speaking anxiety. Workshop includes competition at intercollegiate speech and debate tournaments. This course is recommended for all Speech majors. This course may be repeated for a maximum of 4 units. (Formerly SPCH 5. 1)
Transfer Credit: CSU

SPCH 237
INTERMEDIATE FORENSICS WORKSHOP **1 UNIT**
Class hours: 1 lecture/2 lab
Open entry/open exit
Prerequisite: None.
Corequisite: SPCH 236.
Recommendation: None.
This course provides students with numerous opportunities to improve oral communication, organizational, and research skills while developing self-confidence and reducing speaking anxiety. Workshop includes competition at intercollegiate speech and debate tournaments, and may also include on-campus and/or community speaking opportunities. Emphasis is on student competition and events development. This course is recommended for all Speech majors. This course may be repeated for a maximum of 4 units. (Formerly SPCH 5. 2)
Transfer Credit: CSU

SPCH 238
ADVANCED FORENSICS WORKSHOP **1 UNIT**
Class hours: 1 lecture/2 lab
Open entry/open exit
Prerequisite: None.
Corequisite: SPCH 236 and SPCH 237
Recommendation: None.
This course provides students with numerous opportunities to compete in multiple events at intercollegiate speech and debate tournaments, and also includes on-campus and/or community speaking opportunities. Intensive improvement of oral communication, organizational, and research skills is emphasized, along with commitment to participate in multiple facets of the program. This course, recommended for all Speech majors, develops scholarship, leadership, a strong team ethic, and an appreciation for the academic competitive experience. This course may be 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 life span, including an understanding of how the different areas of language contribute to the total communication process. Students will learn what distinctive features constitute normal speech, language and hearing in a multicultural society. Observation techniques, assessment and intervention tools will be introduced.
Transfer Credit: CSU

SLP 120L
PHONETICS LAB 1 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: SLP 100 and SLP 110 or equivalents with grades 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

SLP 240
CHILDHOOD FIELD EXPERIENCE 2.5 UNITS
Class hours: 1 lecture/12 lab (9 weeks)
Prerequisite: SLP 120, SLP 125, and SPCH 229 or equivalent with grades of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
The field experience will provide the student with the opportunity to perform speech-language pathology assistant responsibilities with children under appropriate supervision.
Transfer Credit: CSU

SLP 245
ADULT FIELD EXPERIENCE 2.5 UNITS
Class hours: 1 lecture/12 lab (9 weeks)
Prerequisite: SLP 235, SLP 240, and SPCH 229 or equivalent with grades of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
The field experience will provide the student with the opportunity to perform speech-language pathology assistant responsibilities with adults under appropriate supervision.
Transfer Credit: CSU

TECHNICAL MATHEMATICS

(Technology Division)

(FOR ADDITIONAL COURSES SEE MATHEMATICS)

TM 50
TECHNICAL MATHEMATICS 3 UNITS
Class hours: 3 lecture
Prerequisite: MATH 40 or equivalent with a grade of Credit or "C" or higher or satisfactory completion of the Math Placement Process.
Corequisite: None.
Recommendation: None.
This course is an introduction to the principles of algebra, geometry, and basic trigonometry as needed by students planning to work in any area of technology. Topics are covered which have particular emphasis on equations and formulas found in the shop areas and drafting labs. Calculations of area, volume and layout are stressed. Conversions

between English and metric measurements are introduced. The students will learn to solve right angle trigonometry problems and will learn how to find solutions to oblique triangles using the law of sines and the law of cosines. (Formerly TM1. 2)

TM 54
MATHEMATICS FOR COMPUTER TECHNOLOGY **4 UNITS**
Class hours: 4 lecture
Prerequisite:MATH 40 or equivalent with a grade of Credit or "C" or higher or satisfactory completion of the Math Placement Process.
This course will cover basic arithmetic processes using binary, octal and hexidecimal numbering systems. Systems of binary code such as BCD and ASCII will be introduced. There is an extensive coverage of Boolean algebra postulates, simplification techniques and applications as used in both computer software and hardware design. BASIC, a computer language, will be used to emphasize applications in technology. (Formerly TM 14)

THEATRE ARTS

(Fine Arts / Communications Division)

TH 101
INTRODUCTION TO THE THEATRE **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
This broad survey of the entire theatre field focuses on modern theatre practice and theory. Some historical background is provided. Topics include stage lighting and design, acting and directing, properties and costume, theatre architecture, make-up, career opportunities, and playwriting. (Formerly TH 1)
Transfer Credit: CSU; UC

TH 102
HISTORY OF THE CLASSICAL THEATRE **3 UNITS**
Class hours: 3 lecture
Prerequisite:None
This course is designed to introduce the student to the history and literature of the theatre from ancient times to the Renaissance. The role of theatre in human affairs will be explored, and particular attention will be given to the way theatre shapes—and is shaped by—the cultural, intellectual, and political forces of its time. (Formerly TH 2)
Transfer Credit: CSU; UC

TH 103
HISTORY OF THE MODERN THEATRE **3 UNITS**
Class hours: 3 lecture
Prerequisite:None.
This course is designed to introduce the student to the history and literature of the theatre from French Classicism to the 20th Century. The role of theatre in human affairs will be explored, and particular attention will be given to the way theatre shapes—and is shaped by-the cultural, intellectual, and political forces of its time. (Formerly TH 3)
Transfer Credit: CSU; UC

TH 104
HISTORY AND APPRECIATION OF MUSICAL THEATRE **3 UNITS**
Class hours:3 lecture
Prerequisite:None.
This course introduces the student to the history and literature of the musical theatre from mid-19th century to present day. The course will explore the stylistic distinctions found in the musical as well as its social and cultural significance. Emphasis is placed on the contributions and influence of the individual writer, composer, or lyricist. (Formerly TH 4)
Transfer Credit: CSU; UC

TH 105
INTRODUCTION TO MUSICAL THEATRE TECHNIQUES **3 UNITS**
Class hours: 2 lecture/2 lab, plus 2 hrs arr.
Prerequisite: None.
This course introduces the student to performance and audition techniques for musical theatre. Emphasis is placed on character development through scene study and song analysis, as well as vocal production and psychomotor awareness exercises. This course may be taken for a maximum of 12 units. (Formerly TH 5)
Transfer Credit: CSU; UC

TH 108
IMPROVISATION FOR THE THEATRE **3.5 UNITS**
Class hours: 3 lecture/2 lab
Prerequisite:None.
In this course, students will learn how to act without a script. The focus will be on improvisational performance, but students will also learn how improvisation is used in actor training and as a tool for rehearsing traditional plays. Class members will participate in exercises designed to free their natural ability in all acting situations. This course may be taken for a maximum of 7 units. (Formerly TH 9)
Transfer Credit: CSU; UC

TH 110 (CAN DRAM 8)
FUNDAMENTALS OF ACTING **3.5 UNITS**
Class hours: 3 lecture/2 lab
Prerequisite: None.
This course is an introduction to acting methods and exercises. It is appropriate for the beginner, but it also lays a strong foundation for students who would like to pursue a career in acting. Students will perform regularly on stage, and will learn to analyze scenes and monologues. This course may be taken for a maximum of 7 units. (Formerly TH 10)
Transfer Credit: CSU; UC

TH 111
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 11)
Transfer Credit: CSU; UC

TH 114
VOICE FOR ACTING **2 UNITS**
Class hours:2 lecture/1 lab
Prerequisite: None.
This course presents vocal techniques to free and develop the actor's voice. It includes exercises in relaxation, physical awareness, and proper breathing, as well as in the development of diction, range and projection as required for theatrical performance. (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 117
STAND-UP COMEDY **3 UNITS**
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: 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 trips to local comedy clubs will be arranged. This course may be taken for a maximum of 6 units. (Formerly TH 17)

TH 120 (CAN DRAM 12)
THEATRE STAGECRAFT **3 UNITS**
Class hours: 2 lecture/3 lab
Prerequisite: None.
This course introduces the student to the principles and basic techniques of theatrical scenery construction. The class will be involved in scene shop procedures and practices, safe tool usage, materials selection, and fabrication methods. (Formerly TH 20)
Transfer Credit: CSU; UC

TH 123 (CAN DRAM 14)
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 23)
Transfer Credit: CSU; UC

TH 130A
REHEARSAL AND
PERFORMANCE I **1 UNIT**
Class hours: 0.5 lecture/2.5 lab
Prerequisite: By audition.
Corequisite: 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 "minor" roles. The course may be taken for a maximum of 4 units. (Formerly TH 30. 1)
Transfer Credit: CSU; UC

TH 130B
REHEARSAL AND
PERFORMANCE II **2 UNITS**
Class hours: 1 lecture/4 lab
Prerequisite: By audition.
Corequisite: None.
Recommendation: None.
Students in this course will rehearse and perform a major theatrical production. 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 30. 2)
Transfer Credit: CSU; UC

TH 130C
REHEARSAL AND
PERFORMANCE III **3 UNITS**
Class hours: 1 lecture/7 lab
Prerequisite: By audition.
Students in this course will rehearse and perform a major theatrical production. Students should contact the Theatre Department for a schedule of audition dates. This particular course is for those cast in "major" roles. The course may be taken for a maximum of 12 units. (Formerly TH 30/TH 30. 3)
Transfer Credit: CSU; UC

TH 131A
THEATRE PRODUCTION I **1 UNIT**
Class hours: 0.5 lecture/2.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces the student to backstage crew skills and duties in connection with the mounting of college plays. The student will be assigned to such running or preparation crews as scenery, lighting, costumes, sound, props, makeup or house management for lab hours. This course may be taken for a maximum of 4 units. (Formerly TH 31. 1)
Transfer Credit: CSU; UC

TH 131B
THEATRE PRODUCTION II **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/TH 31. 2)
Transfer Credit: CSU; UC

TH 135
SHOWCASE **1 UNIT**
Class hours: 1 lecture
Prerequisite:None.
This course will offer weekly programs dealing with all aspects of theatre. Included will be guest speakers from the industry, special presentations by faculty, and showcases of student work. This course may be taken for a maximum of 4 units. (Formerly TH 35)
Transfer Credit: CSU; UC

TH 136
COMMUNITY THEATRE
PRODUCTION **2 UNITS**
Class hours: 1.5 lecture/1.5 lab
Prerequisite: None.
In this course students prepare one-act 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. (Formerly TH 36)
Transfer Credit: CSU

TH 140
THEATRE DANCE—BEGINNING
JAZZ FREESTYLE **2 UNITS**
Class hours: 4 activity
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 FREESTYLE **2 UNITS**
Class hours: 4 activity
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 144
MUSICAL THEATRE WORKSHOP **3 UNITS**
Class hours: 2 lecture/14 lab (9 weeks)
Prerequisite: By audition.
This course involves participation in a major Theatre Department musical production. Activities include singing, dancing, acting, and playing of musical instruments. This course may be taken for a maximum of 6 units. (Formerly TH 44)
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 150
APPRECIATION AND HISTORY
OF THE MOTION PICTURE **3 UNITS**
Class hours: 3 lecture
Prerequisite: None.
This course examines the art of motion pictures and their impact upon society. It includes the viewing and critical analysis of feature films in various thematic categories. (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 Mamet. Students will explore multiple objectives, acting between the lines, and techniques for absurdist 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 studies. (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 (CAN DRAM 10)
STAGE LIGHTING **3 UNITS**
Class hours: 2 lecture/3 lab
Prerequisite: None.
This course introduces the student to the theory and practice of modern stage lighting. Emphasis is placed on the design and function of lighting equipment and control systems, as well as color theory, the historical perspective, and hands-on experience. (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 classwill 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

TH 258
WRITING FOR MOVIES AND TELEVISION **3 UNITS**
Class hours: 3 lecture
Prerequisite:ENGL 52 or equivalent with a grade of Credit or "C" or higher.
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 BASS
(Business Administrative Support Systems)

WELDING

(Technology Division)

WELD 43 / 44 (Not degree applicable)
WELDING OCCUPATIONAL WORK EXPERIENCE **3-4 UNITS**
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Welding work experience 73 or 20 hours of employment per week for Welding work experience 74. The employment must be in a job related to the student's educational goal.
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.

WELD 50
BLUE PRINT READING FOR THE WELDING TRADES **3 UNITS**
Class hours:3 lecture
Prerequisite:None.
Corequisite: None.
Recommendation: None.
This course is designed to enable the student to read and interpret shop and structural drawings and prints. Emphasis is placed on structural shape identification, nomenclature, and symbols. (Formerly WELD 15)

WELD 51L
ADVANCED ARC WELDING SPECIALTY LAB **1 UNIT**
Class hours: 3 lab
Prerequisite: None.
Corequisite: WELD 210L or prior completion with a grade of Credit or "C" or higher.
Recommendation: None.
This is an advanced welding course designed to further develop advanced specialized welding skills in the structural, piping, sheet metal, and construction industries. This class may be repeated for a maximum of 4 units. (Formerly WELD 35)

WELD 52
PIPE WELDING FUNDAMENTALS 4 UNITS
Class hours:2 lecture/6 lab
Prerequisite:WELD 210L or equivalent with a grade of Credit or "C" or higher or current Los Angeles City or AWS certification for structural steel.
This advanced welding course is designed to utilize previously acquired welding skills and techniques on ferrous pipe in the rotated and fixed positions. Emphasis is placed on the welding of open groove pipe joints using the shielded metal arc welding (SMAW) process. Subjects covered will include joint preparation, alignment techniques, pre-heat and inter-pass temperatures, and post-heat requirements. Pipe flanges and fittings will be identified as to alloy content and applicable welding procedures. (Formerly WELD 40)

WELD 53
PIPE LAYOUT 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: WELD 120 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
This advanced welding course emphasizes practical techniques of pipe layout, terminology, use of layout tools, fittings, offset tie-ins, and rolled offset tie-in of parallel pipelines. Instruction in more advanced layout techniques will cover layout of calculated fittings involving pipelines of unequal sizes and compound offset tie-in fittings. (Formerly WELD 41)

WELD 54L
ADVANCED PIPE WELDING 2 UNITS
Class hours:6 lab
Prerequisite:WELD 52 or equivalent with a grade of Credit or "C" or higher.
This is a course designed to refine the student's previously acquired pipe welding skills and prepare the student to pass a certification test in pipe welding. Emphasis is placed on welding ferrous pipe in the horizontal fixed (5G) and 45 degree inclined (6G) positions, using the shielded metal arc (SMAW), gas metal arc (GMAW), and gas tungsten arc (GTAW) welding processes. This course may be taken for a maximum of 4 units. (Formerly WELD 43)

WELD 55
MAINTENANCE WELDING 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: WELD 100 or WELD 110 and WELD 120 or equivalent with grades of Credit or "C" or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This advanced course develops the techniques of maintenance welding including terminology, metal identification, heat treating, and welding of dissimilar metals. Emphasis is placed on following welding procedures as they relate to the job. (Formerly WELD 48)

WELD 100
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

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 50 or equivalent with a grade of Credit or "C" or higher.
This is a course designed to develop welding skills and structural fabrication techniques on real or simulated metal construction projects. Emphasis will be on the safe operation of fabricating equipment as applied to structural steel components. (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
ADVANCED ARC WELDING 2 UNITS
Class hours:6 lab
Prerequisite:WELD 200 or equivalent with a grade of Credit or "C" or higher.
This advanced welding course is designed to prepare the student welder for structural steel welding certifications using the SMAW (Shielded Metal Arc Welding) and FCAW (Flux Cored Arc Welding) processes. This course may be taken for a maximum of 6 units. (Formerly WELD 30)
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.
Recommendation: 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 SPECIALTY LAB 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

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.
This course increases the student's skill in the use of hand tools, portable power tools, and machinery. The course will examine wood technology as it pertains to panel construc-

tion in free standing furniture casework. Topics will include machine anatomy, set-up, and fundamental operations. This course may be taken for a maximum of 8 units. (Formerly WMT 10. 3)
Transfer Credit: CSU

WMT 107
WOOD FINISHING **3 UNITS**
Class hours: 2 lecture/4 lab
Prerequisite: None.
This course is designed to enable the student to understand the functions of equipment used in industrial finishing operations. The basic chemistry of lacquers, enamels, stains and glazes will be covered. Instruction and practice will include the use of brushes and the spray gun in coating various materials with emphasis on wood. This course may be taken for a maximum of 6 units. (Formerly FMT 11/WMT 10. 7)
Transfer Credit: CSU

WMT 111L
INTRODUCTION TO
WOODWORKING LAB **1 UNIT**
Class hours: 3 lab
Prerequisite: WMT 101 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course provides the student who has completed WMT 101 the opportunity to hone and refine skills and complete projects required in the prerequisite course. This course may be taken for a total of 4 units. (Formerly WMT 11. 1)
Transfer Credit: CSU

WMT 118
WOOD TURNING **2 UNITS**
Class hours: 1 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: WMT 101 and WMT 102 or WMT 103 or equivalents with grades of Credit or "C" or higher.
This course introduces students to the methods, tools, materials, and machinery used in wood turning. Students have the opportunity to create turned projects using the woodworking lathe. This course may be taken for a maximum of 4 units. (Formerly WMT 11. 8)
Transfer Credit: CSU

WMT 132
CHAIR DESIGN
AND CONSTRUCTION **4 UNITS**
Class hours: 2 lecture/6 lab
Prerequisite: WMT 103 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This is a course in chairmaking for the advanced Woodworking Manufacturing Technology student. It includes the basic techniques of design, construction and production of chairs. The student will design and build both wood and exposed wood frame chairs. This course may be taken for a maximum of 8 units. (Formerly FMT 32/WMT 13. 2)
Transfer Credit: CSU

WMT 134
FRAME MAKING **4 UNITS**
Class hours:2 lecture/6 lab
Prerequisite:WMT 103 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course introduces the fundamental principles and techniques of frame making for upholstered furniture. Topics include design, engineering, layout, machine woodworking and frame assembly. This course may be taken for a maximum of 8 units. (Formerly FMT 31/WMT 13. 4)
Transfer Credit: CSU

WMT 137
OUTDOOR FURNITURE **2.5 UNITS**
Class hours: 2 lecture/2 lab
Prerequisite: WMT 101 and WMT 102 or WMT 103 or equivalents 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 foundational information and skills related to the 32mm system of cabinet manufacturing. It includes review of the system with hands-on experience in product design and layout of boring patterns, including machine operation in building 32mm cabinets. (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

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 in advanced machine woodworkingis designed to extend to the student an opportunity to increase skills in the use of machine woodworking tools and expand understanding of wood technology. This course may be taken for a maximum of 8 units. (Formerly FMT 22/WMT 20. 2)
Transfer Credit: CSU

WMT 211
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. (Formerly WMT 21. 2)
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 equivalents 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 229L
COMPREHENSIVE WOODWORKING MANUFACTURING SPECIALTY 2.5 UNITS
Class hours: 8 lab
Prerequisite: WMT 102 or WMT 103 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course allows students to perfect and hone skills acquired during previous comprehensive woodworking courses. In this lab, students will design and construct a project of their choice that is relevant to the subject matter being taught. This course may be taken for a maximum of 12.5 units. (Formerly WMT 22. 9
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 equivalents with grades of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course in furniture making will challenge and improve the student's skills through the manufacturing of a historical chair, the Morris Chair. Hand tools, machinery and hand power tools are used in an advanced setting. Topics include planning, manufacturing, utilizing solid wood joinery, complex laminations, subassembly and final assembly as well as finishing. The class focuses on the history and design of the Morris Chair, the first recliner. This course may be taken for a maximum of 12 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 equivalents with grades of Credit or "C" or higher
Corequisite: None.
Recommendation: None.
This course allows students to perfect and hone skills acquired during previous furniture courses. In this lab, students will design and construct woodworking projects that are relevant to the subject matter being taught during the same time period. This course may be taken for a maximum of 10 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 24/WMT 25. 3)
Transfer Credit: CSU

WMT 268
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.
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

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 BASS
(Business Administrative Support Systems)

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

The excellence of a college program is closely related to the excellence of the college faculty. The Cerritos College faculty represents a rich cross-section of scholarship, experience, and above all dedication to teaching. The faculty has helped earn a reputation for Cerritos as one of the finest community colleges in California.

The Faculty Senate of Cerritos College studies and recommends to the administration and Governing Board matters related to academic and professional standards and affairs of the college. The Senate consists of three officers and elected representatives from each of the college's instructional divisions.

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TAIT, MARK E. (1995)
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)
Associate 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

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

WERNER, NEWTON DAVIS (1964)
Professor
Chemistry
A.A., Los Angeles City College
B.S., University of California, Los Angeles
M.S., Ph.D., University of Illinois

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, 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)
Associate 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

ADAMS, KEITH
(1970-1991)
Dean of Vocational Education/Extended Day

AGUIRRE, RUDOLPH
(1959-1987)
Art

ALLEGRE, JEAN
(1964-1991)
French

ALLEN, ROBERT
(1965-1991)
Business-Accounting

ANGLE, NANCY
(1989-1999)
Mathematics

ARCHER, DONNY
(1961-1981)
Mathematics

BAIRD, MARGARET W.
(1965-1983)
Office Occupations

BAKER, EVERETT D.
(1959-1989)
Chemistry

BALCH, DONALD
(1962-1979)
English

BARKER, MATILDA
(1989-2000)
Sociology

BARCLAY, LOIS
(1964-1979)
Cosmetology

BAXTER, DORRIS
(1957-1984)
Chemistry

BEAM, ROGER D.
(1975-1993)
Automotive Technology

BEHRENDS, SHARON
(1976-1996)
Nursing Education

BETZ, CHARLES R.
(1962-1998)
Economics

BEULIGMANN, MARIE
(1981-1999)
Nursing Education

BEYKIRCH, HELEN M.
(1984-1993)
Counselor

BIBB, EVELYN R.
(1958-1986)
English

BLACK, JOHN G.
(1959-1989)
Accounting

BLACK, RHEA G.
(1964-1999)
Physical Education

BLASZCAK, FRANK
(1962-1988)
Machine Tool/Plastics Technology

BLISS, BETTY
(1965-1983)
Dental Assisting

BLUSKE, MARGARET
(1958-1979)
German

BOCK, FRANK
(1961-1988)
Anthropology/Theatre

BOGDANOVICH, JACK
(1971-1998)
Physical Education/Athletics

BONNYCASTLE, WILLIAM L.
(1960-1984)
English

BOODNICK, ALLAN
(1965-1991)
Counselor

BOS, ROBERT KEMP
(1958-1984)
Counselor

BRADY, LAWRENCE
(1970-1999)
Instructional Dean,
Fine Arts and Communications

BRADY, MELVIN
(1963-1991)
Business

BROADBENT, LINDSEY
(1966-79)
Technical Mathematics

BUFALINI, ELVIDIO G.
(1967-1986)
Counselor

BURNIGHT, RALPH F.
(1956-62)
President/Superintendent

CABEEN, CHARLES
(1958-1979)
Psychology

CALEY, DONALD
(1965-1987)
Marketing, Management, Business

CAMPBELL, CLINTON P.
(1965-1983)
Sociology

CANNON, JOHN P.
(1958-1980)
Earth Science

CARLSON, LELAND
(1965-1967)
Mathematics

CARLSON, NORMAN
(1982-1991)
Drafting

CASKEY, WILLIAM
(1961-1989)
Accounting

CATES, CARROLL
(1959-1988)
Physical Education

CHADWICK, RALPH G.
(1962-1980)
Associate Dean, Technology

COLE, JOSEPH C.
(1960-1973)
Psychology

COOK, EDWARD P.
(1965-1981)
Welding

CRACCHIOLO, EDITH E.
(1964-2000)
Psychology

CRANE, JULES
(1962-1989)
Biology

CROUSE, LOIS
(1963-1980)
Nursing Education

CUMMINGS, SELDEN
(1965-1993)
English

DARNALL, FLORENCE
(1959-1977)
Cosmetology

DELEON, MANUEL
(1964-1991)
Art

DELYRE, WOLF R.
(1966-1977)
Dental Assisting

DENNY, PAUL
(1962-1979)
Business Education

DEREMO, GEORGE F., JR.
(1971-1999)
Art

DERMODY, EUGENE
(1965-1997)
History

DESFOR, DONALD
(1957-1989)
Photography/Physical Education

DIAZ, BEDAL
(1963-1989)
Counselor

DI CORPO, NELLO
(1959-1992)
Dean of Community/Continuing Education

DIGHERA, JAMES A.
(1960-1986)
Speech Communication

DOWDEN, JOHN
(1961-1991)
English

DOZIER, AMY L.
(1958-1974)
Physical Education and Recreation

DOZIER, ROSE MARIE
(1964-1989)
French

DUNKIN, V. EDWIN
(1970-1984)
Electronics

ELIAS, ABUNDIO
(1969-1992)
Spanish

ERJAVEC, DONALD
(1965-1998)
Music

ESCOBAR DE PATRYLA, LILLIAN
(1974-1993)
Child Development

FALLAR, MARGARET
(1965-1979)
Nursing Education

FEENEY, JOHN
(1958-1991)
Music

FENNER, WILBURT
(1972-1990)
Art

FINLEY, ROBIN
(1972-1994)
Biology

FISCHER, LAWRENCE
(1961-1992)
English

FLEMING, RONALD
(1963-1966)
Business

FOERSTER, ROBERT
(1969-1989)
Physical Education

FRAME, JAMES
(1965-1991)
Business Mathematics

FRANK, REX C.
(1957-1977)
Business

FROST, WALLACE E.
(1965-1989)
Counselor

FULTS, JON
(1968-1993)
Business Computer Info Systems

GIANNONE, ANTHONY
(1971-1991)
Welding

GIRTNER, JOSEPH P.
(1968-1998)
Art

GRADISHAR, RUDOLPH L.
(1965-1984)
Business Law

GRAUPMAN, ALVINA
(1957-1986)
Office Occupations

HALL, DONALD
(1959-1979)
Division Chairman, Health, P.E., and Recreation

HALLUM, ANDREW
(1973-1992)
Business/Disabled Student Programs

HARRINGTON, ROBERT
(1966-1979)
Data Processing

HARRIS, WAYNE
(1965-1974)
Physical Education

HART, OSCAR W.
(1959-1977)
Welding

HARTMAN, CLAUDE
(1971-1992)
Physical Science

HASSAN, GLORIA
(1982-1999)
Speech Communication

HENDERSON, SCOTT
(1974-1997)
Music

HENDRICKSON, THOM
(1965-1989)
Political Science/History

HENRY, PAUL L.
(1957-1982)
Machine Tool

HENTELL, DUCIA
(1968-1982)
Nursing Education

HENGSTELER, ELIZABETH
(1956-1977)
Philosophy

HERR, FLORENCE S.
(1973-1986)
Business

HICKEY, X. RAYMOND
(1959-1979)
Electronics

HOFFLUND, CLYDE
(1957-1982)
Drafting

HOLLAND, ROGER
(1976-1992)
Business Administration

HOLMAN, JEAN LEE
(1962-1974)
Cosmetology

HOLSTEGE, 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

JEPPESEN, 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, DEARESTEEN
(1968-1991)
Special Education

LAYTON, DONALD W.
(1962-1989)
Earth Science

LEVI, LINDA
(1969-1998)
Art

LEWIS, WILLIAM
(1962-1989)
Speech Communications

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.
(1963-1983)
Business

MANIRE, MARGARET V.
(1959-1975)
School Nurse

MANTZ, CONCETTA
(1973-1993)
Sociology

MARKHAM, WENDELL C.
(1965-1980)
Chemistry

MARTIN, LUGENE
(1957-1989)
Director of Counseling

MARTINEZ, ORLANDO
(1991-1999)
Spanish

MARTINEZ, RUBEN
(1966-1991)
Spanish

MASTALER, RUDY
(1976-1987)
Technical Mathematics

MAYS, GLADYS
(1964-1979)
Mathematics

MCDANNEL, KATHLEEN H.
(1962-1982)
Business Education

MCGRATH, RICHARD F.
(1963-1999)
Administration of Justice

MCMAHON, GEORGE VINCENT
(1961-1984)
Technical Mathematics

MEDOFF, JACK I.
(1966-1984)
Metallurgy

MERKLE, MICHAEL L.
(1982-1995)
Physical Education

MERRILL, MARY ALICE
(1962-1981)
Chemistry

MICHAEL, WILFORD
(1973-1986)
President-Superintendent

MILES, LYMAN C.
(1965-1983)
Administrative Assistant
Learning Resources Center

MILLER, ROBERT
(1976-1990)
Administration of Justice

MILLS, MELVIN
(1965-1989)
Biology/Anatomy & Physiology

MONTGOMERY, DONALD
(1967-1989)
Counselor

MOSES, SHERILL
(1963-1989)
Philosophy/Political Science

MYERS, ARLENE
(1970-1991)
Business

NEFF, JOHN
(1959-1982)
Anatomy and Physiology

NELSON, C. THOMAS
(1974-1996)
Journalism

NEW, BILL
(1964-1997)
Mathematics

NEWMAN, FRAN
(1972-1992)
Vice President of Student Services

NEVILLE, KENNETH C.
(1965-1986)
English/Spanish

NOGLE, DONALD G.
(1957-1986)
Counselor

NORMAN, DAVID
(1965-1974)
Data Processing

NUTTALL, ANN C.
(1970-1978)
English

ORR, MILDRED
(1971-1983)
Office Occupations

PAIGE, DEAN
(1964-1992)
Instructional Dean, Science/Engineering/Math

PALMER, JOHN
(1956-1976)
Political Science

PASCOE, RAYMOND
(1961-1989)
Mathematics

PENDLETON, WILLIAM C.
(1960-1988)
Physical Education

PETER, JAMES R.
(1961-1997)
Chemistry

PINDER, PATRICIA
(1978-1999)
Coordinator of Student Health & Wellness

PLOWMAN, LOIS
(1965-1982)
Business

PORTER, STANLEY
(1964-1991)
Music

POTTER, RAYMOND
(1962-1989)
Counselor

POWERS, LELA
(1969-1991)
Office Skills

POWERS, WILLIS
(1959-1979)
Mathematics

PYKA, ANDREW J.
(1963-1976)
Engineering and Mathematics

REECE, JOHN A.
(1964-1988)
Administration of Justice

REGAN, PATRICIA
(1974-1994)
Medical Assisting

REW, WAYNE
(1970-1999)
Counselor

RINGWALD, SIEGFRIED
(1969-1991)
English/Law

ROBERTS, CECIL
(1971-1979)
Librarian

ROBERTS, EDITH
(1960-1980)
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, MARCELINO
(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
(1959-1988)
Physics

SHAW, FRANK
(1966-1982)
Administration of Justice

SHAWVER, LOUIS REED
(1965-1984)
Industrial Supervision

SHOPFNER, JERRY
(1970-1993)
Autobody

SHOWMAN, FRANK
(1957-1989)
Physics

SHUTT, ROLAND P.
(1963-1972)
Art

SIEGEL, ALLAN B.
(1961-1993)
English

SIEGEL, FRANCES J.
(1962-1966)
History

SIRIANI, DON V.
(1957-1983)
Dean of Instructional Support

SMITH, RALPH
(1961-1983)
Drafting

SOKOLIK, JOSEPH
(1982-1991)
Technology

SPECHT, CARL H.
(1963-1982)
Administration of Justice

SPENCER, SONORA W.
(1960-1973)
Dental Assisting

STAGNER, EUGENE
(1969-1988)
Automotive Technology

STANLEY, DELMAR
(1961-1991)
Accounting/General Business

STERNER, WANDA
(1959-1992)
Chemistry/Energy

STRAUSS, BENJAMIN G.
(1962-1967)
Data Processing

SUMNER, EDWARD M.
(1957-1970)
Electronics

TABOR, RON
(1965-1981)
Speech Communication

TASLITZ, HOWARD
(1964-1992)
History

TAYLOR, ROBERT A.
(1969-1983)
Philosophy/English

THOMPSON, SIDNEY L.
(1964-1984)
Librarian

TILGHMAN, CHARLES
(1965-1991)
Instructional Dean, Fine Arts and Communications

TOLLEFSON, GLENN
(1965-1991)
Numerical Control

TREAT, MARSHALL E.
(1956-1977)
Geology

TUCKER, ROY
(1961-1991)
History/Political Science

TURNBLOM, SELMA
(1987-1998)
Office Technologies

TYNE, JAMES PATRICK
(1963-1997)
Physical Education

VATCHER, OLGA SIEBERT
(1957-1965)
Business Education

VENITSKY, JULIETTE L.
(1957-1984)
Speech Communication

VIGIL, MODESTO
(1972-1993)
Autobody

WAGNER, CHARLOTTE F.
(1968-1978)
Speech Communication

WAGNER, M. EDWARD
(1960-1975)
Dean of Admissions and Records

WALKER, JOAN
(1969-1993)
Cosmetology

WARDEN, WALTER C.
(1957-1972)
Mathematics

WEAVER, EDGAR B.
(1962-1987)
Technology/Drafting

WEBER, NOVA JEAN
(1964-1992)
English

WEGENER, HELEN
(1959-1986)
English

WEIDMAN, MARY LOU
(1964-1993)
Office Occupations

WEIGEL, CAMELIA
(1960-1999)
English

WELCH, GLORYA
(1965-1986)
Chemistry and Mathematics

WENICK, LILLIAN
(1970-1989)
Reading

WENSMAN, MARTIN H.
(1963-1983)
Associate Dean, Business Division

WESSELL, DOUGLAS
(1968-1991)
Philosophy

WESTERLIN, LEE MOILE
(1976-1991)
Instructional Dean, Business

WHALEN, MARGARET
(1964-1985)
Nursing Education

WHITE, LOUISE
(1960-1980)
Nursing Education

WHITEMAN, RICHARD E.
(1970-1989)
Dean of Business and Industry

WHITLOCK, THOMAS
(1964-1999)
Accounting/Business Law

WHITMAN, CORINE
(1967-1981)
Nursing Education

WILLIAMS, GEORGE R.
(1964-1988)
Architecture

WILLIAMS, LEE H.
(1964-1972)
Director of Purchasing

WILSON, LOUIS
(1963-1985)
Mathematics

WILSON, ROY
(1971-2000)
Technical Math

WOLFE, BETTY
(1990-2000)
Reading

WOLFE, FREDERICK C.
(1961-1987)
Counselor

WOOD, MELVIN
(1961-1983)
Art

ACADEMIC AFFAIRS
MASOUD ALAVIAN
MARIA BOYOL
JOHN GALLANT
ROBERT HO
DOROTHY O'DONNELL
LINDA STRANGE
PAMELA TAUSON
MIRIAM TOLSON
FREDA WINFREY

ADMISSIONS AND RECORDS
ROSE ALEGRE
PAUL BADZEY
A.A., Cerritos College
CHRISTINA CAMPBELL
A.A., Cerritos College
SUE BOSS
JOAN CARY
FRANCES CONNELY
SUSAN DEUTSCHMAN
JOEY EAR
A.A., Long Beach City College
HUGO ESTRELLA
BARBARA GAIA
BARBARA LADMIRAULT
SYLVIA LEYBA
BARBARA NOSAL
BENJAMIN PENDELTON
TRENAIN RICHARDSON-BLAND
LEAH STILLWAGON
LISHA VALLES

ADULT EDUCATION/DIVERSITY PROGRAMS
VICKY KOSHE
DORA MACIAS

AUTOMOTIVE
TROY CAGLE
JUSTUS ROESE
LAVERNE MELHORN

BUSINESS EDUCATION
MARILYN BAILEY
PATRICIA CLEVELAND
MICKI ENGLAND
JOHNNY COOPER

BUSINESS SERVICES
LINDA KAUFMAN

CAMPUS POLICE
RANDY ALBANO
DAVID BARR
A.A., Fullerton College
TOM BRUSH
RICHARD BUKOWIECKI
RICARDO BUSTAMANTE
ANGEL CASTILLO
AMADOR CHAIDEZ
ALEJANDRO CHETTO
VICTORIA CLARK
JOHN ECHEVARRIA
TERESA HULL
CARY JAMISON
DEBRA KOMADINA
CHARLOTTE O'ROURKE
RENATO REYES
SANTIAGO RIOS JR.
LAWRENCE SANDERS
CARLO VELAZQUEZ
CYNTHIA WARE

CAREER SERVICES
DORA LOZANO
ANITA MAGALLANES SANCHEZ
MARIA LUISA MOTA
IDANIA PADRON
JIMMIE REED
MARINA RODRIGUEZ
ANN-MARIE SANCHEZ TORRES
CHRISTINA THE
ROSARIO VASQUEZ

CHILD DEVELOPMENT CENTER
KELLY BARNETT
KATHLEEN DIDION
JUDITH DODGE
MARIA WATSON

COMMUNICATION CENTER
CARMEN GARCIA

COMMUNITY, INDUSTRY & TECHNOLOGY EDUCATION
BARBARA DOUGLAS
VERONICA ELIAS
SUZANNE HEAPY
CHRISTINE GOMEZ
TONI GRIJALVA
KATHY HOGUE
CINDY LO
DARYABETH MARTINEZ
MONICA MASINO
CARON PACE
JENNIFER ZARAGOZA

COMPUTER SERVICES
RAY ALGIERE
LESLIE BECK
ARLENE BELKNAP
DOUGLAS BRANTLEY
PATRICIA CHILDRESS
DOUGLAS DRONEY
ERIK DUANE
LAMONT FREEMAN
ANTHONY GONZALES
ALPHONSE MEJIA
MARIA MENDEZ
MARIO MORALES
GILBERT RODRIGUEZ
HARRY RIEGERT
MICHAEL SALAZAR
THOMAS SMITH
BRUCE TANNER
M.S., California State University, Fullerton

COSMETOLOGY
LINDA CASEY
KATHRYN COLUNGA
VERONICA CORTEZ
BEVERLY KECK
NINA MOTRUK
A.A., Cerritos College
B.S., Southern Illinois University, Carbondale
TLITHA PENDLETON
NINA PEREA
CAROLYN REED
SAVERNA REICH
ESTHER WILSON

COUNSELING
BARBARA APPLEBURY
KIMBERLY APPLEBURY

DISABLED STUDENT PROGRAMS
ISABEL AGUILAR
KAREN BOYCE
JUDITH BULANEK
GERALDINE GREENE
VERONICA GUTIERREZ
JACQUELINE INGLE
DUANE RUMSEY
MARCIA TAYLOR
ROBIN THOMPSON
A.A., Cerritos College

ECONOMIC DEVELOPMENT
SYLVIA ACOSTA
ISABEL BERVER
LESLIE NISHIMURA
A.A., Kapiolani Community College
B.S., California State University, Long Beach

E.O.P.S. OFFICE
SYLVIA AREVALO
ROBERTO AGUAYO
ANGELA ALVARADO
MARCIA CHANEY

FACILITIES
JIMMIE AINSWORTH
MARIA BALCAZAR
LEROY BASS
LESLIE BELL
JOSE BORGES
KENNETH BORN
MARY CATHRINE BUKOWIECKI
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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

DRUG	Initial Use	Chronic Use
ALCOHOL	• Heart beats faster and weaker • Become clumsy and stagger • Get confused and can't concentrate • Feel sick to your stomach, vomit • Mood changes quickly to violence or depression	• Permanent liver, heart, brain damage • Liver cancer • Stomach ulcers • High blood pressure • Alcoholism
COCAINE/CRACK	• Heart beats faster/blood pressure rises • Body temperature rises • Breathe faster • Can't sit still or sleep	• Permanent lung damage • Holes and ulcers inside nose • Personality changes/violent behavior • Fear of people and things (paranoia) • See things that aren't real (hallucinate)
MARIJUANA	• Feel calm, relaxed, sleepy • Heart beats faster • Reaction time slows down • Throat, mouth, and lips get dry • Eyes get bloodshot, eyesight blurs • Lose sense of time	• Heart and lung damage • Lung cancer • Can't remember things • Lower ability to fight off colds and flu • Lower sperm count and movement • Dysmenorrhea
STEROIDS	• Heart beats faster/blood pressure rises • Become more alert • Feel dizzy and shaky • Can't sit still or sleep • Breath smells bad, mouth and lips dry out	• Heart attacks • Liver cancer • Stop growing taller • Impotency • Dysmenorrhea
TOBACCO	• Heart beats faster/blood pressure rises • Feel sick to your stomach • Feel dizzy • Feelings of tension/tiredness • Breath smells bad, teeth stained	• Lung and heart damage • Lung, mouth, and throat cancer • Stomach ulcers • High blood pressure • Sense of taste and smell reduced