FOREWORD

Bakersfield College offers an enormous number of programs and services that are designed to meet the educational, occupational, and, to some degree, the personal needs of the students who enroll here. This catalog attempts to present, in a useful way, a sort of road map to help students find their way. Courses and programs are described, procedures are outlined, services are noted, the faculty is listed, and campus buildings are plotted. Students should take a few minutes to become better acquainted with Bakersfield College through the pages of this publication.

Welcome to Bakersfield College.

Richard L. Wright
President

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BAKERSFIELD COLLEGE
CALENDAR
FALL SEMESTER
August 20, 1984 — December 21, 1984

May 8 ............................................ Registration Begins
August 20 ........................................ Instruction Begins
August 20-31 ................................. Late Registration and Program Changes
August 31 ....................................... Last Day to Withdraw From a Semester Length Class Without Paying Course Drop Fee
September 3 ..................................... Labor Day Holiday
September 14 ................................. Last Day to Withdraw From a Semester Length Class Without Possible Penalty
October 15-19 ................................. Mid-term Examinations
October 26 ....................................... Last Day to File for Graduation
November 12 ..................................... Veterans Day Holiday
November 21 ................................. Last Day to Withdraw From a Semester Length Class
November 22-23 ................................ Thanksgiving Holidays
December 17-21 ............................... Final Examinations
December 21 ..................................... End of Fall Semester

SPRING SEMESTER
January 16, 1985 — May 30, 1985

October 30 ....................................... Registration Begins
January 16 ....................................... Instruction Begins
January 16-30 ................................. Late Registration and Program Changes
January 30 ....................................... Last Day to Withdraw From a Semester Length Class Without Paying Course Drop Fee
February 11 ..................................... Lincoln Day Holiday
February 13 ..................................... Last Day to Withdraw From a Semester Length Class Without Possible Penalty
February 18 ....................................... Washington Day Holiday
March 13-19 ..................................... Mid-term Examinations
March 29 .......................................... Last Day to File for Graduation
April 1-5 ........................................... Spring Recess
May 1 .............................................. Last Day to Withdraw From a Summer Session Length Class
May 23-30 ........................................ Final Examinations
May 27 ............................................. Memorial Day Holiday
May 30 ............................................. End of Spring Semester
May 30 ............................................. Commencement

SUMMER SESSION
June 10, 1985 — July 18, 1985

April 30 ............................................. Registration Begins
June 10 ............................................. Instruction Begins
June 10-12 ................................. Late Registration and Program Changes
June 19 ............................................. Last Day to Withdraw From a Summer Session Length Class Without Possible Penalty
June 20 ............................................. Last Day to Withdraw From a Summer Session Length Class Without Paying Course Drop Fee
July 4 .............................................. 4th of July Holiday
July 10 ............................................. Last Day to Withdraw From a Summer Session Length Class
July 18 ............................................. End of Summer Session
THE COLLEGE

BAKERSFIELD COLLEGE

Bakersfield College, established in 1913, is one of the oldest two-year community colleges in the nation. The initial program offered a one-year curriculum, and in 1915 trustees authorized a second year of junior college and normal school courses. The college opened its multi-million dollar campus on Panorama Drive in 1956. Bakersfield College has continued to grow and to meet the community needs of Kern County, which is noted for its rich petroleum and agricultural industries.

ORGANIZATION

The college is operated by the Kern Community College District, formed in 1961. In 1967, Porterville College joined the district. Cerro Coso, serving Ridgecrest and the desert area, began operation in 1973 as part of KCCD. The district draws students from the Delano Joint Union High School District, the Kern High School District (Arvin, Bakersfield, Bakersfield Adult, East, Foothill, Highland, Kern Valley, Shafter, South and West High School), the McFarland Unified School District, the Mojave Unified School District, the Muroc Unified School District (Borong and Desert High Schools), the Porterville Union High School District, the Tehachapi Unified School District, the Trona Joint High School District, and the Wasco Union High School District.

PHILOSOPHY

No educational system is more uniquely American than the community college, developed to meet the ever-changing needs of a rapidly growing, technically-oriented, urban society. The increasing popularity of the community college comes from the recognition that communities have constantly changing educational needs. This college maintains an open-door policy designed to meet intellectual, technical, social, and recreational needs.

Bakersfield College recognizes its responsibility to meet these needs as they occur and to anticipate future demands. The college, with its outstanding facilities and a highly trained faculty and staff, has always been ready to organize new courses and programs to meet specific needs.

OBJECTIVES

The major goals of this college, implemented by guidelines adopted by the elected Board of Trustees, are:

1. A number of post-high school and learning opportunities to meet the educational, technical, vocational, avocational, and general interest needs of the community;

2. Student personnel services to meet the individual needs, such as help in the selection of a vocation or life style, choice of learning activities, and ways of dealing with personal concerns or inter-personal relationships.

3. A flexible program of educational, cultural and recreational services in addition to the regularly scheduled day and evening classes to serve the various needs of the community.

FUNCTIONS

Bakersfield College is committed to leadership in providing quality education in partnership with the community. To meet these objectives, the following functions are carried out:

1. General Education: Education in the arts, sciences, and humanities is provided to encourage the student to broaden his outlines of human knowledge and experience.

2. Career Education: Courses and training are available to prepare students for entrance into many occupational areas in cooperation with business, labor, industry, agriculture and public service agencies.

3. College Transfer and Preprofessional Education: Two year lower-division transfer programs in the sciences and liberal arts are provided to prepare students for transfer to four-year colleges and universities.

4. Developmental Education: The college offers programs designed to allow students to improve basic skills essential to successful completion of college goals. Developmental programs are provided for students whose educational backgrounds are insufficient to allow them entry into degree or other programs.
ACCREDITATION

Bakersfield College, approved by the Chancellor of the California Community Colleges, is officially accredited by the Western Association of Schools and Colleges. It meets all standards of the California State Department of Education and is listed in the Education Directory, Higher Education, Part 3, published by the United States Office of Education. The University of California and other colleges and universities of high rank give full credit for appropriate courses completed at Bakersfield College.

LEAGUE FOR INNOVATION

The Kern Community College District is a charter member of the League for Innovation in the Community College. League membership includes eighteen community college districts in 13 states. The districts include 55 campuses enrolling 850,000 students served by 25,000 staff members.

Membership in the League constitutes a significant recognition of the Kern Community College District’s commitment to excellence in innovation and experimentation designed to enrich and improve all aspects of the college.

Numerous projects have been funded directly through the League. By its membership and active participation, this college reaffirms its dedication to providing the best possible educational program and the fullest utilization of its resources to serving the needs of Bakersfield and Kern County.

CONTINUING EDUCATION AND SUMMER SESSION

Continuing education classes are offered by Bakersfield College at convenient times during the day and evening, both on and off campus. Most of these are regular college courses, which carry the same requirements and credits as regular day classes. Most evening classes are offered one night per week for two or three hours, Monday through Thursday. Other courses are scheduled from 5:30 to 7:00 p.m., two days per week. Thus, a student may enroll in nine units and attend classes only two nights per week. A limited number of classes are offered on Saturday.

It is possible for a student to meet all requirements for graduation through continuing education classes. Adult education courses are offered by the college to meet particular or special community needs.

Bakersfield College is a member of the SOUTHERN CALIFORNIA CONSORTIUM FOR COMMUNITY COLLEGE TELEVISION, a cooperative enterprise of thirty-two Southern California community colleges. Students earn regular college credits and may view the programs and complete the study assignments at home. Examinations are held at Bakersfield College. Further information regarding TV courses may be obtained in the Office of Instruction.

The college also conducts a six-week summer session with both day and evening classes. Depending upon public demand, the class schedule may include some courses given during the regular session. For further information, write or phone the Office of Instruction.

COMMUNITY SERVICES

The Office of Community Services sponsors a variety of events, ranging from concert series to film series. The Arts Ascending program consists of Bakersfield Chamber Orchestra concerts and professional performing artists. In addition, community service offers other activities, such as classes which are recreational or avocational and educational tours. The community service classes are offered without grades or credits and are self-supporting through the charge of a nominal fee to cover the cost of instruction and materials.

OPEN ACCESS TO ALL COLLEGE COURSES

It is the policy of Bakersfield College 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 College, shall be fully open to enrollment and participation by any person who has been admitted to Bakersfield College and who meets such prerequisites as may be established.

In conformity with civil rights legislation, Bakersfield College provides services and benefits to its students without regard to their race, color, national origin, sex, age, and handicap.

Anyone desiring additional information or wishing to file a complaint in regard to the above statement should contact:

Dr. David Scott
Dean, Administrative Services
Bakersfield College
Telephone: 395-4202

Dr. Jack Hernandez
Vice-Chancellor
Kern Community College District
Telephone: 395-4387

Al Bakersfield College cursos de formacion vocacional son disponibles a los estudiantes que no sepan bien hablar in gles. El College tambien provee materias de la gramatica y la pronunciacion y comprension de ingles.

LIBRARY

Located in the center of campus, the Grace Van Dyke Bird Library has over 55,000 books and bound periodicals, 225 current publications, and four newspapers. Two large reading rooms with carrels, tables, and lounge-type chairs provide a pleasing, attractive atmosphere for quiet study or leisure reading. Small conference-type seminar rooms are available for group work, and a typing room provides typewriters for students.
LEARNING CENTER

The Learning Center comprises a small world of special tutors, instructors, and learning devices. This well-equipped, professionally staffed center offers tutorial services, reading classes, learning skills courses, open-entry math classes, and an Educational Diagnostic Clinic. If a student needs to improve reading comprehension, vocabulary, scanning or note-taking skills, or improve reading skills, the Learning Center has a class for him/her.

Open-entry open-exit math classes include arithmetic, prep algebra, college algebra, intermediate algebra and trigonometry. Students work at their own pace and study and test on their own.

HANDICAP SERVICE CENTER

Handicap Service Center provides special services and equipment that will enable handicapped students to participate in the mainstream of college activities. These special services include counseling, registration assistance, prescriptive assessment, tutoring, mobility assistance, speech therapy, interpreters for the deaf, and readers for the blind. Special equipment includes wheelchairs, typewriters (Braille, large-print, electric), tape recorders, notetakers, books (Braille, large-print, tape), and visual devices. All programs are accessible and facilities are tailored to meet individual needs.

INSTRUCTIONAL COMPUTER CENTER

Some of the best job/career opportunities are in data processing and computer science programming and operating. Bakersfield College is riding the wave of the future with a data processing certificate program. Olin Kirkland, faculty computer expert, has directed the computer center at BC since 1976. The college's versatile computer is used for business-related data processing and math-science-engineering related computer science language training, and also for teaching support in English, chemistry, economics, mathematics, astronomy, political science, agriculture, psychology, and counseling.

The BC Instructional Computer Center is designed for two main goals: training for job opportunities and developing programs for use in other campus departments. Programs for student use have been developed for remedial learning skills and for drill and practice in many departments. The growing interest in the way computers can serve society is reflected in ever-increasing class enrollments. Kirkland terms them as a "basic tool . . . of the future."

As the computer continues to become an important part of our lives, and our businesses, Computer Literacy has become a popular course. BC's Computer Literacy class is known as DTA P 1 , our introduction to this fascinating new world.

SENIOR CITIZENS PROGRAM

At convenient community locations, senior citizens will find special classes geared to their specific needs, without the bother of tests, grades, or pressure. These classes are taught by competent, qualified instructors, and the stress is on informality and fellowship. Seniors wishing to enroll in regular classes are encouraged to do so. Special guidance and assistance is available. Persons wishing further information or who wish to suggest additional programs or locations are invited to call the Office of the Dean of General Education at 395-4317.

USE OF COLLEGE FACILITIES

Campus and community groups desiring to use facilities on campus for lectures, films, conferences, or meetings are assisted by the Office of Community Services.

PLANETARIUM

The BC Planetarium has served over 85,000 people. This unique educational resource has been utilized by schools throughout the county, as well as by many community groups. Several interesting illustrated lectures are available to choose from for groups of 35 to 65 people. Community Services handles reservations for the planetarium.

DOWNTOWN CENTER

The Downtown Center (DTC), at 21st and Chester in downtown Bakersfield, is centrally located and easily reached by bus. The DTC is a unique development offering a wide range of classes. It recognizes that business and professional people should have a campus that affords job skill opportunities with the convenience of open-entry classes.

Career and vocational programs at the DTC include clerical and secretarial, accounting and business machines, marketing, management, real estate, mathematics, electronics, police and fire science classes. A variety of transfer and general education courses enable students to plan transfer programs and meet requirements for an Associate in Arts degree. The DTC incorporates a learning center, a library and resource center, and a career-academic counseling center.

The open-entry plan allows students, depending upon their desires and needs, to enroll at different times of the year and to complete courses when they reach their goals or attain desired skill levels.

DELANO CENTER

Established in 1972, the Delano Center serves educational needs of residents in the Northern Kern County and Southern Tulare County area. With its new center, opened in 1977, and operated by Bakersfield College, this campus offers a wide spectrum of courses, both liberal arts transfer classes and short term credit courses. Vocational career classes and programs emphasize the life-long learning philosophy of the Kern Community College District. Classes meet afternoons and evenings for maximum convenience.
ADMISSIONS and REGISTRATION PROCEDURES

ACADEMIC ELIGIBILITY

A high school graduate or anyone who has a Certificate of Proficiency may be admitted to Bakersfield College.

High school juniors and seniors who qualify for the “Concurrent Enrollment” program may be admitted on a part-time basis upon the recommendation of a high school principal and with the approval of the Director of Admissions and Records.

A non-high school graduate 18 years of age or over may be admitted to Bakersfield College if his/her previous training or experience indicates that he/she will profit from the offerings of the college. Such student must have the approval of the Director of Admissions and Records.

Bakersfield College accepts for transfer credit all lower division course work taken at an institution accredited by one of the Regional Accrediting Associations. Course work taken at other institutions may be recognized as evidence of competence for the student applying for Credit by Examination. Students from foreign institutions are referred to the International Education Research Foundation in Los Angeles for transcript translation and evaluation. Official transcripts from other institutions should be on file in the office of the Director of Admissions and Records three weeks before the opening of the semester.

RESIDENCE ELIGIBILITY

Any legal resident of the Kern Community College District may be admitted.

A student whose legal residence is in a district in California which maintains a community college may be admitted only when there is a contractual arrangement between the Board of Trustees of the district of residence and the Board of Trustees of the Kern Community College District, and an attendance permit is granted by the district of residence.

Notices of Restriction (Education Code Section 78032) are in effect between the Kern Community College District and the following community college districts: Antelope Valley, Barstow, Cerrobite, Coachella Valley, Compton, Foothill (DeAnza and Foothill College), Fremont-Newark (Ohlone College), Cavelan, Hartnell, Marin (Indian Valley and Marin College), Mendocino, Merced, Mt. San Jacinto, Palomar, Riverside, San Joaquin Delta, San Luis Obispo (Cuesta College), Santa Clarita (College of the Canyons), Siskiyou, South County (Chabot College), Solano, West Hills, West Kern (Taft College). These notices prohibit the attendance of residents of any of the above named districts at a college of the Kern Community College District unless a permit has been issued; in the same manner residents of this district are prohibited from attendance at any one of the colleges of the above listed districts unless a permit has been issued.

Only under unusual circumstances will permits be issued for students of this district to attend any one of the following colleges: Butte, DeAnza, Foothill, Indian Valley, Marin and Santa Barbara.

DETERMINATION OF STUDENT RESIDENCE

1. To determine a person’s place of residence, reference is made to the following statutory rules:

a. Every person has in law, a residence.

b. Every person who is married or 18 years of age, or older, and under no legal disability to do so, may establish residence.

c. In determining the place of residence the following rules are to be observed:
   (1) There can only be one residence.
   (2) A residence is the place where one remains when not called elsewhere for labor or other special or temporary purpose, and to which he/she returns in seasons of repose.
   (3) A residence cannot be lost until another is gained.
   (4) The residence can be changed only by the union of act and intent.
   (5) A man or a woman may establish his or her residence. A woman’s residence shall not be derivative from that of her husband.
   (6) The residence of the parent with whom an unmarried minor child maintains his/her place of abode is the residence of the unmarried minor child. When the minor lives with neither parent, his/her residence is that of the parent with whom he/she maintained his/her last place of abode, provided the minor may establish his/her residence when both parents are deceased and a legal guardian has not been appointed.
   (7) The residence of an unmarried minor who has a parent living cannot be changed by his/her own act, by the appointment of a legal guardian, or by relinquishment of a parent’s right of control, unless the student qualifies for the self-supporting exception.

2. In general, a resident has citizenship or permanent resident status in the United States and has established residence in California for at least one year immediately preceding the residency determination date (the day before the first day of classes). If you do not have citizenship or permanent resident status in the United States, or have questions regarding your status, please contact the Admissions and Records Office.

3. Bakersfield College is authorized under Federal law to enroll nonimmigrant alien students.
COMMUNITY COLLEGE ENROLLMENT FEES

One-half to five and one-half units—$5 per unit; six or more units—$50.

Course Drop Fee

There is a fee of $10 per course for dropping or being dropped from a course or courses after the first two weeks of the semester. The maximum charge per student per term for drops is $20. The fee is payable at the time the drop is processed. Students who are dropped by instructors will be liable for this fee. The official drop date is the date the drop form is received and processed by the Admissions and Records Office.

A fee waiver may be granted to a student who must withdraw because of extenuating circumstances. Extenuating circumstances are verified cases of accidents, illnesses or other circumstances beyond the control of the student. The student (or student's representative) must submit a completed Course Drop Fee Waiver Request form to the Admissions and Records Office along with the appropriate Withdrawal from Class form(s). If there are extenuating circumstances, the drop fee will be waived. Waivers will apply only to those courses being dropped at the time the waiver request is made and is not retroactive to previous drops regardless of origin.

The course drop fee does not apply to college-initiated drops, such as cancellation of classes or departmental transfers.

Non-Resident Tuition Fee

Non-resident students are required by state law to pay tuition. The tuition fee for non-resident students is $73 per unit up to a maximum of 15 units per semester. There is no charge for units in excess of this maximum. Fees are payable at the time of registration.

APPLICATION FOR ADMISSION

Applications may be obtained from the Admissions and Records Office. They should be filed in the Admissions and Records Office before August 1 for entrance in the fall semester and before January 1 for entrance in the spring semester. The application should include the prospective student's Social Security number. Students who have not yet secured a Social Security number should take steps to do so several weeks in advance of the application deadlines.

A high school transcript and two transcripts from each college attended must be on file in the Admissions and Records Office before the application may be processed.

COLLEGE ASSESSMENT PROGRAM

Academic skill assessment is required for any student who intends to work toward an Associate Degree, transfer to a four-year college, enroll in classes which have prerequisites or enroll in twelve or more units. It is also required for placement in English 1 or 1a. Dates and times of group assessment sessions may be obtained from the Counseling Office—395-4421.

Assessment instruments also are available for students who wish to learn more about their aptitudes and interests. Come to the Career Center in the Student Services Building.

PRELIMINARY ACADEMIC PLANNING

All students who are new to the college should report to the Admissions and Records Office. A representative will explain assessment/enrollment procedures and aid students with their registration.

All students may have the assistance of a counselor/advisor in planning their programs. Using the assessment score as indicators of probable success in a given course, the counselor/advisor will aid students in selecting courses which will help in meeting their goals. In planning programs the students should consider (1) the general requirements prescribed by the college; (2) the special requirements of their major field of study; (3) the general requirements of any future college or university they may expect to attend; (4) the most desirable electives.

The normal program consists of an average of 15 units of work per semester, including physical education. Students may complete their requirements for graduation in four semesters, providing there are only slight variations from the normal program.

COMPLETING REGISTRATION

Following admission students may complete registration. At the time of registration the student must pay all applicable fees. Students must be officially enrolled before attending any class.

The student body membership is fixed at $10.00 per year. Students attending only the spring semester will pay a five dollar membership fee.

The College Bookstore is open during the summer months as well as the regular semesters. It is estimated that the cost of books and supplies will be $125.00 to $150.00 per semester.

Students must supply their own suits for physical education class work.
MINIMUM STUDY LOADS

Students must enroll in a minimum study load in order to meet certain qualifications such as:

1. Certification as a full time student to the Department of Health, Education and Welfare: 12 units.

2. Approval by the Veterans Administration for training under Chapter 31, 32, 34 or 35, Title 38 U.S. Code—

<table>
<thead>
<tr>
<th></th>
<th>Semester</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full time</td>
<td>12 units</td>
<td>4 units</td>
</tr>
<tr>
<td>Three-fourths time</td>
<td>9-11 units</td>
<td>3 units</td>
</tr>
<tr>
<td>One-half time</td>
<td>6-8 units</td>
<td>2 units</td>
</tr>
</tbody>
</table>

3. "F—1" Visa (foreign) student status: 12 units.


5. Eligibility to participate in intercollegiate athletics: 12 units (repeated courses, previously passed with a "C" or higher cannot be counted).

6. Eligibility to participate in student government as an office holder: 12 units.
ACADEMIC REGULATIONS

GRADING SYSTEM

Grades are earned and awarded in each course and are recorded on the student's permanent record. Evaluation of student achievement will be made in relation to the attainment of the specific objectives of the course. At the beginning of a course the instructor will explain these objectives and the basis upon which grades are determined.

A student's work is considered satisfactory when he/she maintains an average of "C" (grade point average of 2.0) or higher.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A - Excellent</td>
<td>4 per unit</td>
</tr>
<tr>
<td>B - Good</td>
<td>3 per unit</td>
</tr>
<tr>
<td>C - Satisfactory</td>
<td>2 per unit</td>
</tr>
<tr>
<td>D - Passing, Less than Satisfactory</td>
<td>1 per unit</td>
</tr>
<tr>
<td>F - Failing</td>
<td>0 per unit</td>
</tr>
<tr>
<td>CR - Credit (at least satisfactory)</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>NC - No Credit (less than satisfactory)</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>I - Incomplete</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>W - Withdrawn</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>IP - In Progress</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>RD - Report Delayed</td>
<td>Not computed in GPA</td>
</tr>
</tbody>
</table>

Credit — No Credit

Some courses are offered on a credit-no credit basis. Upon successful completion of such a course, unit credit will be awarded. However, courses taken on a credit-no credit basis are not used in the computation of a student's grade point average. Regulations for such courses are:

1. A maximum of 12 units may be taken on a credit-no credit basis and applied toward the AA and AS degrees at Bakersfield College.
2. A maximum of three units per semester may be taken on a credit-no credit basis. Exceptions to this rule may be made by the Director of Admissions and Records in cases involving special remedial programs; however, a maximum of six units on a credit-no credit basis would be allowed in such exceptional cases.
3. In courses in which credit-no credit is authorized, the credit grade is granted for performance which is equivalent to the letter grade of "C" or better.
4. Combination classes (credit-no credit or grades) must have an A, B, C, D, F and credit-no credit system.

5. The election of a class by credit-no credit shall be by petition filed with the Admissions and Records Office no later than the last day of the fourth week of the semester or the last day of the second week of summer session.
6. When a student has established the basis for grading as credit-no credit or a letter grade, he/she may not elect to change after the established deadline.
7. Courses in which credit-no credit grading may be used must be so designated by the department involved. A department may require majors to obtain letter grades in that department's major subjects. The following courses may be taken on a credit-no credit or on a letter grade basis, except as indicated.

AGRICULTURE 77; ART — all courses; BIOLOGY 12, 14, 21; BROADCASTING 60; CHEMISTRY 55; CHILD DEVELOPMENT — all courses (except that Early Childhood Development majors may not take CH DV 13a, 13b, 40a, 40b, 40c, 41a, 41b, 41c, 43 or 51 for credit-no credit); COUNSELING 1, 5, 11, 12, 13; ENGLISH — all courses except ENGL 1, 60; FAMILY AND CONSUMER EDUCATION: All CLOTHING, DECORATIVE ARTS, FAMILY STUDIES, INSTITUTIONAL MANAGEMENT, INTERIOR DESIGN and NUTRITION courses (transfers majors may not take transfer courses which are part of the major on a credit-no credit basis); HISTORY — all courses except HIST 8a, 8b; JOURNALISM 51; MATHEMATICS 60 (a credit does not qualify a student for MATH A); MUSIC 22abc; PHILOSOPHY — all courses (except Philosophy majors); PHYSICAL EDUCATION 6sk, 6skc, 75; POLITICAL SCIENCE — all courses; PSYCHOLOGY 31, 32, 52, 55; READING 62; SOCIOLOGY 21, 27; SPECIAL EDUCATION 40a, 40b, 40c; SPEECH 35, 42, 55; THEATRE ARTS — all courses (except for Theatre Arts majors); WOMEN'S STUDIES 27.

I — Incomplete

A grade of "I" indicates the student has not completed the requirements of the course. The instructor must submit a statement of the requirements for clearance of the incomplete and also indicate the grade to be assigned if the requirements are not completed. An "I" must be made up no later than one year following the end of the term in which it was assigned. An "I" may not be assigned as a withdrawal grade. If the work stipulated is not completed within the time limitation, the grade assigned in lieu of the work being completed will be entered on the permanent record.

W — Withdrawn

The student has withdrawn from a course or has been dropped from a course by the instructor, as indicated in these regulations.
IP — In Progress

The "IP" indicates the course extends beyond the normal end of an academic term and work is in progress, or the student has applied for in-progress status in those courses listed as open-entry/open-exit courses, and has been approved by the instructor to register and complete course requirements in a succeeding semester in order to receive credit and a course grade. In open-entry/open-exit courses, the instructor must submit an evaluative grade which will be entered on the permanent record if the student does not re-enroll in that course during the subsequent attendance period. The "IP" cannot be given more than twice for any particular course.

RD — REPORT DELAYED

The "RD" is a symbol assigned by the registrar when there is a delay in reporting the grade of a student due to circumstances beyond the control of the student.

CREDIT BY EXAMINATION

Credit by examination may be granted to a student enrolled at Bakersfield College subject to certain conditions. Information on the policy and procedures for challenging a course for credit by examination may be obtained at the Admissions and Records Office.

DEAN'S LIST

Special recognition is accorded students who maintain a 3.3 grade point average during a semester in which they accumulate at least 42 grade points. Students whose academic achievement is at this level are placed on the Dean's List and are given general recognition on campus and in the community.

GRADUATION WITH HONORS

Students whose cumulative grade point average is 3.5 or higher will be graduated with honors. Transcripts will indicate this honor.

HONORS AT ENTRANCE PROGRAM

The President of Bakersfield College invites qualified members of each entering freshman class to participate in the Honors Program using criteria set up by the College Honors Committee. These students are designated as President's Scholars. Scholarships based exclusively on academic performance are made available to President's Scholars and certain services and benefits are available to assist them in carrying out their academic program.

PROBATION

Academic Probation — A student who has attempted at least twelve cumulative semester units shall be placed on academic probation when he/she has earned a cumulative semester grade point average below 2.0.

Progress Probation — A student who has attempted at least twelve cumulative semester units shall be placed on progress probation when the percentage of all units for which entries of "W", "I", and "NC" reaches or exceeds fifty percent.

A student transferring from another collegiate institution will be placed on probation according to these same standards.

The academic status of each student is printed on the student's copy of the Grade Report which is issued at the conclusion of each term.

REMOVAL FROM PROBATION

A student on academic probation for a grade point deficiency shall be removed from probation when the student's accumulated grade point average is 2.0 or higher.

A student on progress probation because of an excess of units for which entries of "W", "I", and "NC" are recorded shall be removed from probation when the percentage of units in this category is below fifty percent.

DISQUALIFICATION

Any student who is placed on academic probation for two consecutive semesters of enrollment shall be disqualified for admission to classes the following semester.

Any student who is placed on progress probation for two consecutive semesters of enrollment shall be disqualified for admission to classes the following semester.

REINSTATEMENT

A student who is disqualified may be conditionally readmitted the following semester upon petition to the Director of Admissions and Records. The student may be limited to specific courses and to the number of units which may be attempted.

REPEATING A COURSE

Certain specific classes are identified as repeatable. All other courses may be repeated only under the following conditions.

A student may file a petition with the Admissions and Records Office to repeat a course in which a grade lower than a "C" or its equivalent has been earned. The student may also petition the Admissions and Records Office to count (for grade point calculation) ONLY the most recently earned units, grades and grade points when the student has repeated a course and received a grade of "A," "B," "C," "D," or "CR." Both the original and subsequent grades will remain a part of the Permanent Record. The college can provide no assurance that repeated courses will be treated in a like manner by other institutions.
ACADEMIC RENEWAL

A maximum of 20 units of substandard academic grades (D, F and NC) taken at Bakersfield College which are not reflective of a student's present demonstrated ability may be disregarded in the computation of the grade point average if all of the following conditions exist: 1) at least five years have elapsed since the course work to be disregarded was recorded; 2) at least 12 units of satisfactory course work (2.0 GPA) have been completed at Bakersfield College subsequent to the course work to be alleviated; 3) the student petitions in writing to the Director of Admissions and Records stating the reasons for requesting academic renewal; 4) the student states in the petition the specific courses to be considered under the academic renewal policy.

If approved, the substandard work will be disregarded in the computation of the grade point average and an annotation made on the permanent record. The permanent academic record shall remain a true and complete academic history and the course work disregarded under this policy will remain on the permanent record.

Academic renewal may not be used to raise the GPA in order to qualify for graduation with honors. Academic renewal may not be applied to courses which have been used to meet graduation, certificate, and certification requirements.

LATE ENTRANCE

Report to the Admissions and Records Office for admission processing. Depending on the date and status of each class, written permission may be required from one or more of the following: instructor, counselor/advisor, and/or the Dean of Instruction. Students must be officially enrolled before attending any class.

ATTENDANCE

The attendance policy for each course is established by the instructor and communicated to each class, preferably in writing. Attendance policies will be reasonably related to course objectives, the requirements of institutional reporting, and legitimate absences. Instructors are responsible for maintaining accurate attendance and scholarship records.

While it is the responsibility of instructors to communicate attendance policies and to apply them equally to all students, it is the responsibility of students to know the policy in each of their classes and to be aware of their current attendance status. Students who have been absent from a class should notify the instructor of the reason for the absence. Absence in no way relieves students of responsibility for work missed. Excessive absence may result in the student being dropped from the course. Instructors may drop a student from a course when absences number the equivalent of two weeks of class recorded from the first day of instruction. If particular circumstances warrant and can be justified academically, faculty members may drop students after less than two weeks of absences.

Faculty members should give full consideration to excusing students from classes to participate in scheduled college activities, e.g. athletics, music, forensics, field trips, etc. The student must make arrangements in advance to make up the work to be missed.

WITHDRAWING FROM CLASSES

After registration has been completed and within the withdrawal date guidelines, students may withdraw from a class or classes by submitting a Withdrawal from Class form to the Admissions and Records Office. Using the proper form, and within the withdrawal date guidelines, instructors may drop students from a course for nonattendance, disruption, failure to meet the requirements of the course. Students may also be dropped from a course for failure to meet course prerequisites. Please see FEES for Course Drop Fee information.

A student who withdraws or is dropped from a semester-length course through the fourth week of the semester will not have the course included on the permanent record. A "W" will appear on the permanent record for courses dropped between the first day of the fifth week and the last day of the fourteenth week of the semester. No courses may be dropped after the last day of the fourteenth week of the semester. In courses other than semester-length, the instructor or Admissions and Records Office should be consulted regarding withdrawal date deadlines.

Students who find it necessary to withdraw from the college are required to return all check-out supplies, equipment, and library books; and pay all fines and debts owed the college.

ADDING CLASSES

After registration has been completed and within the guidelines, students may officially add a class to their programs by submitting, in person, an approved Add Form to the Admissions and Records Office. Beginning with the first day of the semester, depending on the date and status of each class, written permission may be required from one or more of the following: instructor, counselor/advisor, and/or the Dean of Instruction. Students must be officially enrolled before attending any class.
EXAMINATIONS

A final examination or evaluation is required in all courses. Instructors will give final examinations or evaluations at the regularly scheduled time.

GRADE CHANGES

A student who feels a grade is in error may request a review of the grade by the instructor. Errors may be corrected only upon petition of the instructor to the Admissions and Records Office.

STUDENT CONDUCT

Students are expected to observe reasonable standards of behavior. Failure to respect the rules of the College and the rights of others are sufficient reasons for disciplinary action according to the Student Conduct and Fairness Procedure.

The Fairness Procedures for students (grievance procedures) are published in the Reneguide Student Handbook or a copy may be obtained in the Office of the Dean of Students.

LIBRARY REGULATIONS

Students are encouraged to visit the Library and acquaint themselves with the many resources and services. A reference librarian is available to assist in locating and using the library materials.

Information on library hours and regulations is given in the Student Handbook or may be obtained from a member of the Library Staff.

STUDENT PERSONNEL SERVICES

COUNSELING AND ASSESSMENT

Bakersfield College offers a wide variety of services designed to assist students in choosing their courses and planning their futures. Counseling services are available to help students with their immediate needs and future academic and vocational goals. The purposes of these services are:

1. To help students understand their capacities and aptitudes, as they relate to college work and their chosen occupation.

2. To assist students to make sound educational plans.

3. To provide students with up-to-date information concerning demands, opportunities and skills necessary for a wide variety of jobs and careers.

4. To assist students in analyzing study difficulties and to help them make necessary course selections for successful completion of their goals.

5. To help students make proper transfers to whatever subsequent college they may attend or to help them obtain employment if they decide to complete their formal schooling at Bakersfield College.

Professional counselors and advisers can assist students in working out study programs that incorporate their aims and recognize their previous educational experience and scholastic aptitudes.

Sound vocational planning is based largely on knowledge of particular job requirements and general employment trends. This detailed career information is available in the Career Center, where Eureka, the California Career Information system, helps match student abilities and job desires with current information about career possibilities and educational programs. The instructional program emphasizes vocational outlets for major courses of study. The College Placement Office assists students in locating part-time or vacation employment while attending college or in finding permanent positions when they graduate.

HEALTH SERVICES

The Student Health Center is located in the concourse of the Library Building. Students are entitled to the services of the Health Center provided by a full-time registered nurse and a part-time physician. There is student insurance coverage for campus-related injuries.

The goal of the Health Center is to help students maintain a state of optimum health, both mental and physical. This is achieved by emergency first aid treatment, counseling, physical consultation, and general medical and physical attention.

Information on Health Center hours may be obtained from the Health Center staff.

HOUSING

Bakersfield College has on campus two residence halls which provide room for approximately 120 students. Additional housing is available near the campus and listings are provided in the Housing Office, located at Campus Center, Room 4 (see Off-Campus Housing).

The college recognizes the importance of student housing as a part of its total educational program. Thus, to the extent that it is possible, on-campus housing is made available so that students may experience the companionship, cultural environment, and social opportunities which are a vital part of college life.
Eligibility for Assignment to Residence Halls

Residence in halls is ordinarily restricted to students who are registered for 12 or more units of regular college work and who live outside the normal commuting distance to the college. If the halls are filled and there is a waiting list for placement, applicants on that list who cannot commute to the college are given priority as openings occur.

When and How to Apply

A mailing list is maintained in the Office of Student Affairs throughout the academic year. Students interested in on-campus housing will be sent material as it becomes available.

Notice of Acceptance

When an acceptance to the halls has been made, a space reservation notice will be forwarded to the applicant telling them the date the halls open and additional information required prior to occupancy.

Off-campus Housing

As a service to students seeking off-campus accommodations, the Housing Office keeps an up-to-date listing of rooms and apartments that various house holders and landlords submit to the college. Although the college does not list these accommodations as "approved housing," there is the expectation that both landlords and students will live up to their respective obligations. Students may use these listings in search of off-campus housing; but, since they change daily, it is impossible to mail such lists. These listings describe in detail the facilities being offered. Apartments, rooms, and room and board are available within walking or easy commuting distance of the college and some rooms are available with kitchen privileges.

APPLICATIONS AND ALL CORRESPONDENCE SHOULD BE DIRECTED TO:

STUDENT AFFAIRS/HOUSING OFFICE
CAMPUS CENTER, ROOM 4
BAKERSFIELD COLLEGE
1801 PANORAMA DRIVE
BAKERSFIELD, CA 93305

VOCATIONAL REHABILITATION AID

In cooperation with the Department of Rehabilitation, Bakersfield College offers training programs for those having an employment handicap resulting from a physical, communication or emotional disability. The Department may provide for financial aid covering the full cost of fees and books and other services. Any student who believes he/she may be entitled to this assistance should consult with or address an inquiry to the Department. Their office is located at 1820 20th Street (Tele: 395-2525) Bakersfield. Students applying for aid through the Department are urged to report to the Handicap Service Center (Admin. 6) as soon as possible prior to the opening of a school semester.

SOCIAL SECURITY

Students who qualify for educational assistance under the provisions of the Social Security Laws should contact the local Social Security Office for detailed information. The Admissions and Records Office confirms enrollment for Social Security purposes.

PLACEMENT SERVICES AND PART-TIME EMPLOYMENT

The College Student Employment Office assists students in locating part-time employment in the community while attending college; it also assists graduates in finding permanent full-time positions. In the area of part-time employment a special effort is made in locating work for which the student has been trained in order to relate his work experience to his vocational objective. The placement service is available to students enrolled in 6 units or more as well as graduates. Since it is not always possible to secure employment immediately, the new student who plans to be self-supporting should not begin his college courses without sufficient funds to cover the major expenses of at least the first semester. Every effort is made to find employment opportunities, but there is no guarantee that work will be found for all applicants. Referrals for placement are made on the basis of the possession of skills required by the employer. Since employers rely upon the college to furnish them with information helpful in evaluating applicants, the Student Employment Office works in close cooperation with department chairperson and instructors. Students desiring help in finding career positions are urged to register with the Student Employment Office early in the college year in which they will graduate. No charge is made for this service.

The Student Employment Office is a part of the Counseling Area and is located in the Student Services Building, Room 29.

VETERANS

Bakersfield College is approved as an institution of higher learning for the training of veterans and veterans' dependents entitled to educational assistance. Veterans who have served in the armed services of the United States are eligible for admission. Veterans may arrange for training programs which will enable them to complete two years of college training, clear scholarship and subject deficiencies and/or complete high school graduation requirements. Bakersfield College will grant credit to veterans for specific service experience and certain educational training completed while in service. Evaluation of such experience and training will be made by the Records Office. Credit evaluations will conform to the regulations set forth by the State Approval Agency of the California State Department of Education and the recommendations of the American Council on Education.

Evaluations made and credit allowed by Bakersfield College are subject to review and re-evaluation by any college or university to which the veteran may later transfer. All educational opportunities and personnel services offered in the college are available to the veterans.
A veteran who plans to enter Bakersfield College under Chapter 31 is required to have the Veterans Administration approve his/her occupational choice prior to his/her enrollment in college.

Veterans who intend to enter Bakersfield College may secure necessary information regarding admission by calling or writing the Veterans’ Coordinator in the Admissions and Records Office.

STUDENT FINANCIAL ASSISTANCE

Students seeking financial assistance to meet the costs of education are encouraged to contact the Financial Aids Office, located in the Student Services Building. A variety of grants, scholarships, loans and part-time employment opportunities are available for students who qualify on the basis of financial need, enrollment in six or more units leading to a degree or certificate, and satisfactory academic progress.

Applications and full information concerning the following programs can be obtained by personal contact or by phoning 395-4427.

PELL GRANT (formerly Basic Grant) Federal program of grants based upon need and cost of attendance.

BOARD OF GOVERNORS GRANT (BOGG) State supported fee grant program based upon need and costs of enrollment fee.

EXTENDED OPPORTUNITY PROGRAM AND SERVICES (EOPS) State supported program of grants and/or academic support in the form of tutoring and special counseling for low income students.

SCHOLARSHIPS Cash awards provided by The Bakersfield College Foundation and local groups and organizations for students of academic merit and/or financial need.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT Federal program which provides additional grant assistance for students of exceptional financial need.

NATIONAL DIRECT STUDENT LOANS Federal program of low-interest, long-term repayment loans in amounts based on financial need up to $1500 annually.

NURSING STUDENT LOANS Federal program of low-interest, long-term repayment loans for students enrolled in ADN Program. Loans may range up to $1500 annually.

GUARANTEED STUDENT LOANS State insured loans available from certain banks and lending institutions on long term repayment plans.

SHORT-TERM LOANS Loans of $50 or less for emergency needs repayable within 30 days at no interest.

FEE WAIVERS State supported fee grant program for students of exceptionally low incomes, including recipients of AFDC, SSI or General Assistance. Students enrolled in less than six units may apply for Fee Credit Assistance.

PART-TIME EMPLOYMENT:

ON-CAMPUS EMPLOYMENT is available through College Work-Study, a Federally funded program for students who have need of employment to meet college expenses.

ON-CAMPUS EMPLOYMENT is also available for students with particular skills that are needed by various college departments. Financial need is not a criteria for this type of employment; however, applications must be made to the Financial Aids Office.

OFF-CAMPUS EMPLOYMENT—See Placement Services and Part-time Employment.
STUDENT ACTIVITIES AND ORGANIZATIONS

The Associated Students of Bakersfield College is the student governing organization and has the major responsibilities for student government, campus organizations and the student activity program in general. The goals of this program harmonize with the goals of the college to provide opportunities for personal development, group cooperation, leadership development and the enrichment of college life.

The legislative power of the Associated Students is vested in a Board of Representatives whose members are elected by the students. This Board is composed of Student Body officers, Class officers and representatives from the student publications. All official action taken by the students of the college comes from the decisions of this Board.

Bakersfield College has a broad club and organization program representing professional service organizations, religious affiliations, athletics and special interests. The Activities Board coordinates club activities through representation from each club and organization.

The judicial Board—the Student Court—is composed of four Associate Justices and a Chief Justice with meetings held each week. Duties of the court include checking the constitutional obligations of clubs and organizations, presiding over and supervising elections, and hearing cases involving Academic Due Process.

Students find that clubs and organizations stimulate new interests and provide opportunities to develop leadership qualities and to render service to the college and community. In addition to general coordination, the Board seeks to encourage a worthwhile activity program. In particular the Board stages Homecoming in the Fall and Western Days in the Spring, which are two of the major events held on the campus during the year. Students interested in any of the aforementioned clubs or organizations may obtain further information at Student Affairs and Housing, Campus Center, Room 4.

CHICANO CULTURAL CENTER

The Chicano Cultural Center of Bakersfield College offers a variety of services to students and the community. The Center, located in Campus Center, Room 3, has over 700 books in Spanish and English on history, political science, economics, education, sociology, psychology, philosophy, music, art, literature, and other areas. Other research materials (journal and newspaper articles, research papers, maps, etc.) on the history, culture and heritage of the Chicano are also made available to students.

The Center provides a series of lectures and programs to community organizations and groups. It serves also as a clearinghouse for information on Chicano organizations in the community.
GRADUATION

The Associate in Arts or the Associate in Science degrees shall be conferred by the Board of Trustees of the Kern Community College District upon a Bakersfield College student who has satisfactorily completed the following requirements. These requirements are consistent with those prescribed by the Board of Governors of the California Community Colleges and the Board of Trustees of the Kern Community College District.

GENERAL EDUCATION

Because an open-door community college should prepare students to live effectively and to contribute positively to our society, the primary function of a General Education Program is to develop and integrate every student's knowledge, skills, attitudes, and experiences so that the student can engage effectively in a lifelong process of inquiry, decision-making and personal growth. The General Education Program provides a basic framework for a broader system of academic knowledge which reaches across academic disciplines and programs, providing for an integration of the knowledge gained in individual classes with other courses and college experiences. At the same time the General Education Program has its own character and distinction, its own unity and cohesiveness.

Because certain basic competencies are necessary for an educated person, the General Education Program specifically requires competency testing (or course alternatives) in reading, written expression, and mathematics.

To facilitate transferability, a student's General Education Program should, with planning, parallel comparable programs at four-year institutions of higher education. However, the General Education courses may also be applied toward the Associate Degree or various certificate programs.

GRADUATION REQUIREMENTS 1984 – 1985

COMPETENCY REQUIREMENTS

In addition to the specific degree requirements listed below, students initially enrolling Fall 1983 and thereafter, will have to meet competency requirements in three different areas. Current requirements include:

A. Composition: Satisfactory completion of Engl 1 and/or satisfactory completion of Competency Examination.

B. Mathematics: Satisfactory completion of Math 50, any college algebra course, or one year of high school algebra.

C. Reading: A satisfactory score on the Bakersfield College Placement/Assessment; a satisfactory grade in Rding 50; or, a satisfactory score on the Bakersfield College Reading Proficiency Test.

ASSOCIATE IN ARTS DEGREE

A. GENERAL REQUIREMENTS

1. Completion of 60 units of graded courses, with at least a 2.0 grade point average.

2. Twelve (12) units must be completed in residence at Bakersfield College.

3. Eighteen (18) units must be completed in a discipline, or from related disciplines as listed in the California Community College’s “Taxonomy of Programs.”

4. Eighteen (18) units of general education must be completed, including at least three (3) units in each of the following areas: Natural Sciences, Social and Behavioral Sciences, Humanities, and Language and Rationality.

B. SPECIFIC REQUIREMENTS (May be included in the above general requirements)

1. English ........................................... 3 units
   Engl 1, 1a

2. Speech .......................................... 3 units
   Spch 1, 2, 4, 51

3. Social Sciences (at least one course must be from group 1 or group 2) 6 units
   (a) American History and Politics:
      Group I: Hist 4a, 8a*, 17a*, 18a*, 20a*, 30a*(Ch St 30a*), 31, 40*; Pol S 1; Soc S 51.*
      Group II: Hist 4b, 8b*, 17b*, 18b*, 20b*, 30b*(Ch St 30b*) 36, 38; Pol S 3, 4.
   (b) Other Social Science Courses: Any listed above, or Jrnl 1*.

4. Behavioral Sciences .............................. 3 units
   Anth 2; Bus 58; Psych 1a, 51; Soc 1, 50; Ch Dv 13a.

5. Natural Sciences ................................. 3 units
   Life Sciences: Anat 1, 11; Biol 1a, 1b, 11, 53; Env 1; Hl Sc 1; Nutr 10; Entom 1; Fores 2; Orn H 3; Soils 1.
   Physical Sciences: Astr 1; Chem 1a, 2a, 11, 55; Geog 1; Geol 1a, 10 10L; Metro 3; Phy S 10, 11, 50; Physc 1a, 2a, 10, 11a.
6. Humanities .......................................................... 3 units
   Arch 1, 10, 41, 42.
   Art 1, 2ab, 2ef, 3ab, 3cd, 5ab, 6ab, 7ab, 9ab, 11ab, 13ab, 16ab, 17ab,
   30a, 30b, 30c, 32a*-(Ch St 32a*), 32b*-(Ch St 32b*), 33ab, 35, 36ab*, (Wn
   St 36ab*), 40.
   Brdcs 1b, 2.
   Ch St 31a*-(Engl 31a*), 31b*-(Engl 31b*), 32a*-(Art 32a*), 32b*-(Art
   32b*), 34*-(Music 34*), 35*-(Ch St 35*).
   Engl 1b, 5a, 5b, 11, 12, 21*, 23a*-(Wn St 23a*), 23b*-(Wn St 23b), 27, 28,
   30a, 30b, 31a*-(Ch St 31a*), 31b*-(Ch St 31b*), 34, 35, 41a, 41b, 41c,
   41d, 65.
   Fren 1ab, 2ab; Germ 1ab, 2ab, 3, 4, 5a, 5b, 52ab; Latin 1, 2; Span 1ab*,
   2ab*, 3*, 4*, 5a*, 5b*, 52ab*.
   Int D 15a, 22, 23ab.
   Music 1a, 2, 5ab, 6ab, 9ab, 10a, 10b, 10c, 10d, 12a, 12b, 12c, 12d, 13a,
   13b, 13c, 13d, 14a, 14b, 14c, 14d, 15, 17a, 17b, 17c, 17d, 21ab, 22abc,
   23*, 27, 34*-(Ch St 34*), 53, 54, 55.
   Phil 6a, 6b, 10, 12, 13, 14, 30, 32*, 33, 34*, 35*-(Ch St 35*), 37, 39, 51,
   53ab.
   Sp Ed 1, 11.
   Theat 1abc, 4ab, 5ab, 6ab, 7ab, 12, 21, 27, 30, 31, 32; Wn St 23a*-(Engl
   23a*), 23b*-(Engl 23b*).

7. Mathematics, Logic, Computer Science .................................. 3 units
   Bus 51, 251, 53, 253.
   Com S 5, 10, 18.
   Math A, B, C, D, 1, 2, 6a, 15, 22, 23, 50, 53a, 54, 200a, 200c, 200d, 250.
   Phil 7, 52.

8. Health Education ...................................................... 2 units
   H Ed 1, 2, 3, or 50 or by completion of an approved Health Careers Program
   (RN, Rad T, or LVN).

9. Physical Education .......................................................... 2 units
   All activity courses numbered 3 through 29, and Music 19ad (Students who
   have observed their 21st birthday or who have a medical excuse are exempt.)

   *Note: Cross Cultural Awareness: Students must complete at least one class
   identified with an (*) in order to complete the Cross Cultural Awareness re­
   quirement for graduation.

Associate in Science Degree
A. General Requirements — Associate in Science Degree
   1. Completion of 60 units of graded courses, with at least a 2.0 cumulative grade
      point average.
   2. Twelve (12) units must be completed in residence at Bakersfield College.
   3. Completion of at least 30 units in a discipline (major course of study) approved
      for the A.S. degree.
   4. Completion of at least three (3) units in each of the following areas: Composi­
      tion, Speech, Social Science, Behavioral Science, Natural Science,
      Humanities, and Mathematics or Logic. Ethnic studies must be included in at
      least one of the above.

B. Specific Requirements
   1. English .............................................. 3 units
      Engl 1, 1a.
   2. Speech ........................................... 3 units
      Spch 1, 2, 4, 51.
   3. Social Sciences .................................. 3 units
      (a) American History and Politics:
         Group I: Hist 4a, 8a*, 17a*, 18a*, 20a*, 30a*-(Ch St 30a*), 31, 40*;
         Pol S 1; Soc Sci 51*.
         Group II: Hist 4b, 8b*, 17b*, 18b*, 20b*, 30b*-(Ch St 30b*), 36, 38; Pol
         S 3, 4.
      (b) Other Social Science Courses: Any listed above, or Jrnl 1*.
4. Behavioral Science .................................................. 3 units
   Anth 2; Bus 58; Psych 1a, 51; Soc 1, 50.
   Ch Dv 13a.

5. Natural Sciences ................................................... 3 units
   Life Sciences: Anat 1, 11; Biol 1a, 1b, 11, 53; Envir 1; Hl Sc 1; Nutr 10;
   Entom 1; Fores 2; Orn H 3; Soils 1.
   Physical Sciences: Astr 1; Chem 1a, 2a, 11, 55; Geog 1; Geol 1a, 10, 10L;
   Metro 3; Phy S 10, 11, 50; Physc 1a, 2a, 10, 11a.

6. Humanities ............................................................ 3 units
   Arch 1, 10, 41, 42.
   Art 1, 2ab, 2ef, 3ab, 3cd, 3ef, 5ab, 6ab, 7ab, 9ab, 11ab, 13ab, 16ab, 17ab,
   30a, 30b, 30c, 32a*-(Ch St 32a*), 32b*-(Ch St 32b*), 33ab, 35, 36ab, 40.
   Brdcs 1b, 2.
   Ch St 31a*-(Engl 31a*), 31b*-(Engl 31b*), 32a*-(Art 32a*), 32b*-(Art 32b),
   34*-(Music 34*), 35*-(Ch St 35*).
   Engl 1b, 5a, 5b, 11, 12, 21*, 23*-(Wn St 23a*), 23b*-(Wn St 23b*), 27, 28,
   30a, 30b, 31a*-(Ch St 31a*), 31b*-(Ch St 31b*), 34, 35, 41a, 41b, 41c,
   41d, 65.
   Fren 1ab, 2ab; Germ 1ab, 2ab, 3, 4, 5a, 5b, 52ab; Latin 1, 2; Span 1ab*,
   2ab*, 3*, 4*, 5a*, 5b*, 52ab*.
   Int D 15a, 22, 23ab.
   Music 1a, 2, 5ab, 6ab, 9ab, 10a, 10b, 10c, 10d, 12a, 12b, 12c, 12d, 13a,
   13b, 13cd, 14a, 14b, 14c, 14d, 15, 17a, 17b, 17c, 17d, 21ab, 22abc,
   23*, 27, 34*-(Ch St 34*), 53, 54, 55.
   Phil 6a, 6b, 10, 12, 13, 14, 30, 32*, 33, 34*, 35*-(Ch St 35*), 37, 39, 51,
   53ab.
   Sp Ed 1, 11.
   Theat 1abc, 4ab, 5ab, 6ab, 7ab, 12, 21, 27, 30, 31, 32.
   Wn St 23a*-(Engl 23a*), 23b*-(Engl 23b*).

7. Mathematics, Logic, Computer Science .......................... 3 units
   Bus 51, 251, 53, 253.
   Com S 5, 10, 18.
   Math A, B, C, D, 1, 2, 6a, 15, 22, 23, 50, 53a, 54, 200a, 200c, 200d, 250.
   Phil 7, 52.

8. Health Education ..................................................... 2 units
   H Ed 1, 2, 3, or 50 or by completion of an approved Health Careers Program
   (RN, Rad T or LVN).

9. Physical Education .................................................. 2 units
   All activity courses numbered 3 through 29, and Music 19ad. (Students who
   have observed their 21st birthday or who have a medical excuse are exempt.)

*Cross Cultural Awareness: Students must complete at least one class identi­
ified with a (*) in order to complete the Cross Cultural Awareness requirement
for graduation.

Note: Major courses of study for the A.S. Degree must conform to the re­
quirements outlined in Title V and must be approved as an appropriate major
by the Curriculum Committee.
Universities and colleges prescribe their own standards of eligibility for transfer. Admission practices of four-year institutions are in process of change and students expecting to transfer after one or more semesters at Bakersfield College should be careful to check entrance requirements. Bakersfield College students who maintain high scholarship and who complete the required pattern of courses may expect to make a satisfactory transfer to the institution of their choice. To achieve junior standing at the California State Universities and Colleges or at the University of California, the student must earn a minimum of 60 units of acceptable credit.

Students who develop problems in the articulation of courses should contact the Bakersfield College Articulation Officer at the earliest possible date.

ELIGIBILITY FOR THE CALIFORNIA STATE UNIVERSITY AND COLLEGES:
The student who was ineligible on the basis of his/her high school record may be admitted on the basis of obtaining a 2.0 grade point average in a minimum of 56 units of community college work designated as baccalaureate level.

The student who was eligible on the basis of his/her high school record may transfer at any time so long as his community college grade point average is 2.0 or better. A student may transfer a maximum of 70 community college units to a state university/college.

ELIGIBILITY FOR THE UNIVERSITY OF CALIFORNIA: The student who was ineligible for the University on the basis of his/her high school record may be admitted by achieving a grade point average of 2.4 or higher in a minimum of 56 units of courses acceptable for transfer.

The student who was eligible from high school may be admitted if he/she has an overall grade point average of at least 2.0 in all transfer courses attempted. A student may transfer a maximum of 70 community college units to the University (after 70 units acceptable toward degree have been earned, no further unit credit will be granted for community college courses).

Since many institutions require either the Scholastic Aptitude Test or the American College Testing Program, the following information may be useful in formulating transfer plans.

ELIGIBILITY FOR INDEPENDENT CALIFORNIA COLLEGES AND UNIVERSITIES

Students who transfer to independent colleges or universities find they are given academic credit for most, if not all, of their community college studies. Virtually all institutions give full credit for general education courses and usually for other courses designated for transfer by the community college.

Some colleges and universities stipulate a certain number of completed units before considering students eligible for transfer. Others do not and will accept students at any time. The requirements are outlined in the respective college catalogs, available upon request from the college's Office of Admissions.

Independent institutions are generous in awarding credit. They invite students to make an appointment with their Office of Admissions in order to discuss transfer opportunities.

Financial Aid may be a primary factor in making it possible to attend an independent college. Most students who apply for financial aid are eligible and do receive financial aid packages. Currently some independent college students with full need receive as much as $5,000 a year for tuition, fees and room and board.

COLLEGE TRANSCRIPTS

Upon written application by the student, a transcript of all work completed at Bakersfield College will be prepared and forwarded to any college, university, or individual designated by the student. Each student is entitled to two free transcripts; thereafter, a fee is charged for each transcript.

GENERAL EDUCATION REQUIREMENTS OF FOUR YEAR COLLEGES

On the following pages are the general education requirements for the California State University and Colleges. The general education requirements of the several branches of the University of California are so varied that it is wise to study the catalogue of the institution of transfer and to confer with a counselor regarding specific application of Bakersfield College courses toward the requirements.
To be eligible for graduation with a Bachelor's Degree from a California State University or College, students must complete a minimum of 48 semester units of general education. Bakersfield College will certify completion of up to 39 lower division general education units for students based on the pattern outlined below. The remaining 9 required units must be upper division courses completed at the four-year university. Certification is not available to students with fewer than 12 applicable units.

Students are strongly encouraged to complete the following pattern at this college:

- **Area A** - Complete all.
- **Area B** - Complete 9 units.
- **Area C** - Complete 9 units.
- **Area D** - Complete 9 units.
- **Area E** - Complete all.

Certification of the above will be of significant help to the student. **Students must request certification through the Office of Admissions and Records at the time transcripts are requested.**

**A. WRITTEN AND ORAL COMMUNICATION (9 units):** One course from each selection.


**B. PHYSICAL UNIVERSE AND LIFE FORMS (8-12 units):** One course from each section; one course from either B.1 or B.2 must include laboratory (identified with ‘*’).

- B.1. Physical Universe: Geog 1a; Astr 1; Chem 1a*, 2a*, 11*; Geol 1a*, 10, 10L*, Metro 3; Physc 1a*, 2a*, 10, 11*, Phys Sci 10, 11*.
- B.2. Life Forms: Anth 1; Anat 1*, 11*; Bact 2*; Biol 1a*, 1b*, 10, 10L*, 11*; Geol 7*; Hl Sc 1*; Physl 1*, 11*.

**C. ARTS, LITERATURE, PHILOSOPHY AND FOREIGN LANGUAGE (9-12 units):** At least two areas out of C.1, C.2, C.3, C.4 must be included. A maximum of three units is allowed for C.5.

- C.1. Arts (art, dance, drama, music): Art 1, 30a, 30b, 30c, 32a, 32b, 33ab, 34, 35, 36ab, 40; Ch St 32a, 32b, 32c, Int D 15a, 22, 22a, 23a; Music 1a, 2, 10a, 10b, 10c, 10d, 21ab, 22abc, 23, 26a, 27, 34; Phil 30, Theat 1abc, 4ab, 5ab, 6ab, 7ab, 8, 27, 31 *, 32 *; Wn St 36ab. *Limit of 3 units total for Theat 31, 32.
- C.2. Literature: Ch St 31a, 31b; Engl 1b, 5a, 5b, 11, 12, 21, 23a, 23b, 25, 28, 30a, 30b, 31a, 31b, 35; Phil 30; Spch 35; Wn St 23a, 23b.
- C.3. Philosophy: Ch St 35; Phil 6a, 6b, 7, 10, 12, 14, 32, 33, 35, 37, 39.

**D. SOCIAL, POLITICAL, AND ECONOMIC INSTITUTIONS (9-12 units):** Students "must include a reasonable distribution among the categories specified." Every attempt should be made to include Western and Non-Western cultures either under C (6 and 7) or D (6 and 7).

- D.1. Social Institutions: Anth 2, 5a, 5b, 5c, 7; Ch Dv 13a; Ch St 36; Geog 1b; Hist 16, 17a, 17b; Soc 1, 28, 30, 36; Wn St 27, 28.
- D.2. Political Institutions: Ch St 30a, 30b; Hist 17a, 17b, 20a, 20b, 30a, 30b, 31, Pol S 1, 2, 4.
- D.3. Economic Institutions: Bus A 20; Econ 1, 2, 10.
- D.4. Contemporary: Bus A 20; Ch Dv 13a; Ch St 30b, 36; Econ 1, 2, 10; Hist 16, 17b, 18b, 19b, 20a, 20b, 30b, 38; Pol S 1, 2, 4; Psych 1a; Soc S 1; Soc 1; 30, 36; Wn St 1.
- D.5. Historical: Anth 2, 3; Ch St 30a, 30b, 31a, 31b; Hist 4a, 4b, 8a, 8b, 12, 15a, 15b, 17a, 17b, 18a, 19a, 19b, 20a, 20b, 30a, 30b, 31, 36, 38, 39, 40; Spch 32; Wn St 21.
- D.6. Western Context: Anth 5a, 5b, 5c, 7, Geog 1b, Hist 16, 17a, 17b, 20a, 20b, 30a, 30b, 31, 36, 38, 39, 40; Pol S 2.
- D.7. Non-Western Context: Geog 1b; Hist 19a, 19b, 39; Pol S 2.

**E. UNDERSTANDING AND SELF-DEVELOPMENT (0-3 units):** A maximum of one unit will be allowed for activity classes (E.2).

- E.1. Integrated Organism: Envr 1; Fam S 31; Fore 2; H Ed 1, 2, 3; Nutr 10, 14; Phil 12, 34; Psych 1a, 30, 31, 32, 37; Soc S 1; Wn St 14, 37.
- E.2. Activity: Auto 1; Nutr 14; Ph Ed 3L; 4, 5, 6, 6ct, 6fa, 6hx, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 20, 21, 22, 25, 26, 27, 28, 29, 32; Wn St 14.
CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION REQUIREMENTS
PRIOR TO FALL 1981

The following applies to students in continuous attendance prior to the Fall 1981.

To be eligible for the bachelor’s degree from a state university or college, a student shall have completed a minimum of 40 units of general education (breath requirements) of which at least 32 units shall be selected from the areas listed in sections IA through ID below and of which at least eight units must be selected from section II.

A NATURAL SCIENCES
B SOCIAL SCIENCES
C HUMANITIES
D BASIC SUBJECTS
II ADDITIONAL REQUIREMENTS

Although Bakersfield College has adopted a General Education pattern for certification to the California State Universities and Colleges, it should be noted that state universities/colleges may specify additional general education requirements beyond the 40 which a community college may certify. Students should consult the catalogue of the state college of their choice for specific general education information. In some instances, courses required for a given major may not be used for general education purposes even though they are included in the general education list of acceptable courses. In like manner courses used to satisfy the United States History and Government requirement in some cases may not be used for general education purposes.

Students preparing for a teaching career should become aware of the general education requirements for specific credentials. Students are advised to consult their counselors for additional information. Students must request certification through the Office of Admissions and Records.

State University General Education Breadth Requirements

I. Complete 32 units from the following categories:

A. NATURAL SCIENCE (6 units minimum): One course Life Science, one Physical Science, one laboratory (biology, chemistry, or physics).

1. Life Science: Anat 1, 11, 43a; Anth 1*: H Ist 2, 23; Biol 1a, 1b, 1c, 10*, 10L, 11, 12, 14, 16, 22*; Hist 1, 11.

2. Physical Science: Asst 1*, 2*; Chem 1a, 2a, 5, 8*, 9, 11, 12, 21, 26; Geol 1a, 1b, 6a, 6b, 7, 10*, 10L, 11, 12; Metro 3*; Pharm 43; Phy S 10, 11, 15b, 35: Phys 1a, 1b, 1c, 2a, 2b, 10, 11a, 11b.

B. SOCIAL SCIENCE (6 units minimum): One course from each group.

1. History, Political Science: (Code Requirements: Hist 8a, 17a, 18a, 20a, 30a, Ch St 30a, Pol S 1*).

2. Anthropology, Geography, Psychology, Sociology, Economics: Anth 2, 3, 4, 5a, 5b, 5c, 6, 7: Ch Dv 10, 13a, 13b; Ch St 5b, 36, 38a, 38b, 38c, 44; Cor A 7; Econ 1, 2, 10; Fam S 31.

C. HUMANITIES (6 units minimum): Choose at least three units from each of the following groups:

1. Literature: Eng 1b, 5a, 5b, 9, 10, 11, 12, 18a, 18b, 20a, 20b, 21, 23a, 23b, 27, 28, 30a, 30b, 31a, 31b, 33a, 34, 35, 36, 41a, 41b, 41c, 41d, 42a, 45. Ch St 31a, 31b, 33a, Jml 42ab, Spch 21, 22, 35, Wn Ed 23a, 23b.

2. Philosophy: Phil 6a, 6b, 10, 1la, 11b, 12, 13, 14, 32, 33, 34a, 34b, 35, 37, 39, Ch St 35.

3. Fine Arts: 20ab, 22, 25, 26, 28, 30a, 30b, 31a, 31b, 32a, 32b, 33a, 34, 35a, 35b, 36, 38, 39, 40, Brdc 1a, 1b, Ch St 32a, 32b, 34; Music 1a, 1b, 2, 3a, 3aL, 3b, 3bL, 5a, 5b, 5c, 5d, 6a, 6b, 6c, 6d, 7, 8a, 9b, 10, 12a, 13b, 14, 15, 17, 17a, 20a, 22a, 23, 24, 25, 26a, 26b, 34; Phil 30, 37; Theat 1a, 1b, 1c, 4a, 4b, 5a, 5b, 6a, 6b, 7a, 7b, 12, 21, 27, 30, 31, 32, 35; Wn St 30ab.


4. Foreign Language: Fren 1ab, 2ab; Germ 1ab, 2a, 3, 4a, 5a, 5b; Letin 1, 2; Span 1ab, 2a, 3, 4, 5a, 5b.

D. BASIC SUBJECTS (9 units minimum): Engl 1a and one of the following Spch courses are required: Speech 1, 2, 3, or 4. Choose at least three units from other courses listed below.

1. Written and Oral Communications: Engl 1a, 1; Spch 1, 2, 3, 4.

2. Mathematics: Com S 5, 10, 18; Math C, D, 1, 2, 5a, 6a, 6b, 6c, 6d, 15, 18, 22, 53, 53d, 200c, 200d; Psych 5.

3. Logic: Phil 7, 8.

NOTE: Commencing with new students in September 1979 and applying to all students subsequent to the 1980-1981 academic year, a three unit oral communication course will be required.

II. Additional Requirements: Complete at least eight units including one course from Group 1, two courses from Group 2, and additional units from Groups 3 and/or 4 to total 40 units general education.

1. Health Education and First Aid: H Ed 1, 2, 3; Ph Ed 31a.

2. Physical Education (Two Semesters Required): Music 19mb, Ph Ed 3L, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29.

3. Electives: Adm 1J, 3a, 4; Aero 1; Arch 1, 2, 6, 10, 11, 12, 21, 22, 25, 26, 31, 31J, 41, 42, 44, 45; Auto 1; Biol 18; Brdc 2, 3, 27a, 27b; Bus 30; Bus A 1a, 1b, 18a, 18b; Ch Dv 40a, 40b, 40c, 41a, 42, 43; Ch St 45; Chth 9a, 9b; Com S 19; Cours 5, 48; Dta P 1, 4, 5, 6; Dec A 17, 18; Ele T 1; Engr 1a, 1b, 22, 23, 36, 45; Envr 1; Fam S 11; Foods 10a, 10b, 16; Forens 1, 2, 3, 4, 5, 6; Gen S 5, 15, 19, 12, 12a, 12b, 39, 41; Hort 3, 7, 8a, 8b, 40, 41; In Dr 30e, 30f, 30e, 30f, 40; Insur 39; Int D 15a, 15b, 21a, 21b, 22, 23a, 23b; Jml 2a, 2b, 3, 15, 27a, 27b, 27c, 27d, 27e; Math 31; Mch S 1; Metal 1; Music 20; Nut 10, 11; Orn H 2, 3, 4, 7, 40, 41; Ph Ed 34a, 34b, 34c, 34e, 36a, 36b, 36c, 36d, 40, 41, 42, 43, 45, 46, 48; Pol S 5, 22, 42, 45, Psych 21, 39a, 39b, 47, 49; Rdng 1ab, R Ext 39; Sec T 10; Soc 5, 10, 36L; Solar 1; Sp Ed 1, 11; Spch 5, 18, 27, 31ab, 31cd; Weld 1; Wn St 1, 22, 39a, 39b; Wood 1, 2.

4. Excess Units from 1-A, B, C, D, above.
COURSE CLASSIFICATION SYSTEM

Listed below are courses offered by Bakersfield College with classifications required by Title V of the Administrative Code. Following the listing will be found information which defines the several classifications. It should be noted that the classifications are subject to review and change, particularly as concerns transferability. Courses classified as a 3 (UC and CSUC) would transfer to most private colleges but such a determination has not been made for all such institutions.

Column 1
A Liberal Arts and Sciences
B Remedial Education
D Community Education—Personal
F Community Education—Parenting
G Community Education—Community and Civic Development
I Occupational Education

Column 2
0 Not transferrable, not degree applicable
1 Not transferrable; Associate Degree only
2 California State University/CSU and Private Colleges
3 University of California System (UC), CSU and Private Colleges

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Notes:
- **Col 1** represents different courses.
- **Col 2** represents different sections or timeslots for each course.
- **Col 3** represents the corresponding classes or requirements for each course.
- **Col 4** represents additional specific details or notes, if applicable.
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| 27 |
The following section is a compilation of programs of study and course descriptions offered at Bakersfield College.

**CAREER PROGRAMS**

Bakersfield College offers two-year career programs in a variety of fields leading to immediate employment in such occupational fields as agriculture, business, home economics, industry and public service. These courses may be counted toward higher degrees at certain state colleges provided the student continues with advanced study in the same field. Students are urged to plan a program which leads to graduation from the community college with the Associate in Arts or Associate in Science degree.

**PRE-PROFESSIONAL PROGRAMS**

Programs of study are also offered which lead to graduation from Bakersfield College and are intended to provide a basis for a student's entrance into a senior college or university. The required and recommended courses are listed in terms of the major field of study to be emphasized. The student who plans to graduate from Bakersfield College and wishes to transfer to another college or university has four requirements to fulfill: (1) Clear up any entrance deficiencies in grades or subject matter if the senior college requires it. (2) Fulfill the general requirements of that senior college which are prescribed for all students. (3) Fulfill pre-major requirements, i.e., the lower division requirements for the upper division major. (4) Fulfill the general requirements of the local college. If a student plans to transfer prior to graduation, the first requirement listed above must be completed and progress on the other three must be made. In presenting the following outline of programs of study and majors, the college assumes that students in transfer programs will have completed a college preparatory program in high school.

**CERTIFICATE OF COMPLETION**

The Certificate of Completion documents the satisfactory completion of training sponsored by Bakersfield College in a specific area of study. Departmental faculty will define requirements.

**CERTIFICATE OF ACHIEVEMENT**

A Certificate of Achievement is awarded for the completion of a formal instructional program, with a minimum of 24 units, which is designed to give the learner the skills, knowledge and attitudes required for a specific field of endeavor. Specific requirements in a subject matter area will be developed by departmental faculty and approved by the Curriculum Committee.

**TRANSFER CREDIT**

The transferability of courses is determined by the senior institutions. Generally the University of California accepts courses numbered 1 through 49 and the California State Universities and Colleges accept courses so numbered as well as other courses which Bakersfield College has deemed appropriate for the baccalaureate degree. Students should consult with their counselors regarding admission and degree requirements for baccalaureate programs at specific senior institutions.

All courses designated by the symbol "•" are classified as baccalaureate level courses by Bakersfield College.
The Bakersfield College Agriculture Department offers three possible options for agriculture majors:

The Certificates of Achievement
Certificates are available in the following areas: Agriculture Business Management, Agriculture Mechanics, Animal Husbandry, Field Crop Production, Forestry, Horticulture and Ornamental Horticulture.

The student must complete a total of 30 units, 24 of which must be in the field of Agriculture. The additional 6 units may be electives in any field including Agriculture. Each program must be approved by an Agriculture Department counselor or advisor.

Associate Degree Programs
Graduation requirements for an Associate of Arts Degree and Associate of Science Degree are found in the beginning of the catalog.

Transfer Programs
Students may use those units accumulated in option 1 and 2 (courses which are identified by a black dot) for transfer to a four-year institution.

The Agriculture Department realizes that education should lead toward employment; therefore, emphasizes in all classes training skills which are needed in the field of agriculture, whether it be the Certificate, Associate Degrees, or Transfer Program.
ANIMAL HUSBANDRY

The animal husbandry major prepares students for occupations in those areas of agriculture involving production of livestock.

Both the scientific and practical aspects of the production of beef, sheep, swine and dairy cattle are stressed in the day courses. Classes dealing with the production and care of horses are offered in the evening.

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN H 7</td>
<td>Intro An Husbandry</td>
<td>3.0</td>
</tr>
<tr>
<td>SOILS 1</td>
<td>Intro Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>CRP S 2</td>
<td>Alfalfa/Forage Crps</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN H 8</td>
<td>Judging</td>
<td>2.0</td>
</tr>
<tr>
<td>AN H 9</td>
<td>Sheep Product</td>
<td>3.0</td>
</tr>
<tr>
<td>AN H 10</td>
<td>Horse Product</td>
<td>3.0</td>
</tr>
<tr>
<td>AN H 11</td>
<td>Adv Horse Product</td>
<td>3.0</td>
</tr>
<tr>
<td>AN H 43</td>
<td>Livestock Diseases</td>
<td>3.0</td>
</tr>
</tbody>
</table>

FIELD CROP PRODUCTION

This program provides instruction in the planting, growing, harvesting and marketing of field, forage and vegetable crops as well as irrigated and range pasture crops.

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRP S 1</td>
<td>Prin Crop Product</td>
<td>3.0</td>
</tr>
<tr>
<td>CRP S 2</td>
<td>Alfalfa/Forage Crps</td>
<td>3.0</td>
</tr>
<tr>
<td>SOILS 1</td>
<td>Intro Soil Science</td>
<td>3.0</td>
</tr>
</tbody>
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**Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 1</td>
<td>Prin Fruit Growing</td>
<td>3.0</td>
</tr>
<tr>
<td>HORT 2</td>
<td>Prin Fruit Growing</td>
<td>3.0</td>
</tr>
<tr>
<td>CRP S 12</td>
<td>Vegetable Proluct</td>
<td>3.0</td>
</tr>
</tbody>
</table>

FORESTRY

The program provides a broad general experience in the arts and sciences to develop an individual with a well-rounded education, and a core of basic courses which furnish the student with a perspective of the scientific and professional area of forestry, natural resources, fisheries and wildlife. The preforestry, resource conservation and wildlife management program at BC should conform to the recommended program as prescribed by the school to which the student wishes to transfer.

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORES 1</td>
<td>Intro to Forestry</td>
<td>3.0</td>
</tr>
<tr>
<td>FORES 2</td>
<td>Natural Resources</td>
<td>3.0</td>
</tr>
<tr>
<td>FORES 3</td>
<td>Wildlife Management</td>
<td>3.0</td>
</tr>
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</table>

**Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORES 4</td>
<td>Wildlife Law Enforc</td>
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</tr>
<tr>
<td>FORES 5</td>
<td>Idnt Calif Wildlife</td>
<td>3.0</td>
</tr>
<tr>
<td>ENTM 1</td>
<td>Applied Entomology</td>
<td>3.0</td>
</tr>
<tr>
<td>CRP S 1</td>
<td>Prin Crop Product</td>
<td>3.0</td>
</tr>
</tbody>
</table>

HORTICULTURE

The Horticulture major prepares students for general fruit farming, positions in sales, as vineyard foremen, as field and plant representatives, and for work in related agriculture fields as well as for transferring to a four-year college.

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 1</td>
<td>Prin Fruit Growing</td>
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</tr>
<tr>
<td>SOILS 1</td>
<td>Intro Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>CRP S 1</td>
<td>Prin Crop Product</td>
<td>3.0</td>
</tr>
<tr>
<td>ENTM 1</td>
<td>Applied Entomology</td>
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**Electives**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>AGRIC 2</td>
<td>Ag Mktg/Economics</td>
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</tr>
<tr>
<td>AGRIC 3</td>
<td>Farm Acctg/Mgmt</td>
<td>3.0</td>
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</tbody>
</table>

ORNAMENTAL HORTICULTURE

The Ornamental Horticulture major prepares students for the nursery industry, landscaping, ground work, work as field and plant representatives, and work in related agriculture fields as well as for transferring to a four-year college.

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORN H 1</td>
<td>Orn Hort/Nurs Pract</td>
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</tr>
<tr>
<td>ORN H 3</td>
<td>Orn Pl Idnt/Mater</td>
<td>2.0</td>
</tr>
<tr>
<td>ORN H 4</td>
<td>Orn Shrub/Tree Idnt</td>
<td>2.0</td>
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</table>

**Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ORN H 2</td>
<td>Plant Propagation</td>
<td>3.0</td>
</tr>
<tr>
<td>ORN H 7</td>
<td>Landscape Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ORN H 8</td>
<td>Landscape Gardening</td>
<td>3.0</td>
</tr>
</tbody>
</table>
PRE-VETERINARY MEDICINE

The veterinarian diagnosis and treats diseases and disorders of animals; determines the nature of disease or injury and treats animals medically or surgically; performs autopsies to determine causes of death; gives advice on care and breeding of animals. Some engage in general practice, some become involved in research and development, while others are active in such fields as consultation, teaching, technical writing, sale or promotion of commercial products, or provide technical services for commercial firms.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1a General Chemistry</td>
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</tr>
<tr>
<td>CHEM 1b Gen Chem/Qual Anal</td>
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<td>BIOL 1a Prin Animal Biology</td>
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<tr>
<td>CHEM 8 Organic Chemistry</td>
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<td>BIOL 1c Prin Cellulr Biol</td>
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<td>CHEM 9 Organic Chem Lab</td>
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<td>PHYS 2ab General Physics</td>
<td>8.0</td>
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<tr>
<td>ENGL 1a English Composit</td>
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Electives

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>AN H 41 Appl Animal Nutritn</td>
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<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Additional English or Speech</td>
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ASSOCIATE OF SCIENCE DEGREE PROGRAMS

AGRICULTURE BUSINESS MANAGEMENT

Minimum units required in discipline — 32

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
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<tbody>
<tr>
<td>AGRIC 1 Agric Business Mgmt</td>
<td>3.0</td>
<td>CRPS 14 Cotton Production</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRIC 10 Intro Calif Agric</td>
<td>3.0</td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>SOILS 1 Intro Soil Science</td>
<td>3.0</td>
<td>HORT 1 Prin Fruit Growing</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td>CRPS 2 Alfalfa/Forage Crops</td>
<td>3.0</td>
</tr>
<tr>
<td>AN H 7 Intro An Husbandry</td>
<td>3.0</td>
<td>CRPS 12 Vegetable Productn</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRIC 2 Ag Mrktg/Economic</td>
<td>3.0</td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>AN H 41 Appl Animal Nutritn</td>
<td>3.0</td>
<td>ENTM 1 Applied Entomology</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRIC 3 Farm Acct/Mgmt</td>
<td>3.0</td>
<td>AGRIC 52 Farm Tractors</td>
<td>2.0</td>
</tr>
<tr>
<td>CRPS 1 Prin Crop Productn</td>
<td>3.0</td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td>AN H 43 Livestock Diseases</td>
<td>3.0</td>
</tr>
<tr>
<td>ORN H 4 Orn Shrub/Tree Idnt</td>
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FIELD CROP PRODUCTION

Minimum units required in discipline — 33

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
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<th>Course</th>
<th>UN</th>
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<tbody>
<tr>
<td>CRPS 1 Prin Crop Productn</td>
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<td>CRPS 14 Cotton Production</td>
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</tr>
<tr>
<td>AGRIC 10 Intro Calif Agric</td>
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<td>OR</td>
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</tr>
<tr>
<td>SOILS 1 Intro Soil Science</td>
<td>3.0</td>
<td>HORT 1 Prin Fruit Growing</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS 2 Alfalfa/Forage Crops</td>
<td>3.0</td>
<td>AGRIC 1 Agric Business Mgmt</td>
<td>3.0</td>
</tr>
<tr>
<td>ENTM 1 Applied Entomology</td>
<td>3.0</td>
<td>AGRIC 51 Farm Machinery</td>
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</tr>
<tr>
<td>AGRIC 53a Agric Mechanics</td>
<td>2.0</td>
<td>CRPS 12 Vegetable Productn</td>
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</tr>
<tr>
<td>AGRIC 3 Farm Acct/Mgmt</td>
<td>3.0</td>
<td>AGRIC 36a Diesel Tractor Syst</td>
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<tr>
<td>AGRIC 36a Diesel Tractor Syst</td>
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<td>AGRIC 54b Farm Welding-Arc</td>
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<tr>
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<td>AGRIC 3 Ag Mrktg/Economic</td>
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<tr>
<td>AGRIC 1 Agric Business Mgmt</td>
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<td>SOILS 1 Intro Soil Science</td>
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<tr>
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<td>OR</td>
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<tr>
<td>AGRIC 10 Intro Calif Agric</td>
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<td>AGRIC 51 Farm Machinery</td>
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<tr>
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<td>AGRIC 53a Agric Mechanics</td>
<td>2.0</td>
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<tr>
<td>AGRIC 3 Farm Acct/Mgmt</td>
<td>3.0</td>
<td>AGRIC 36a Diesel Tractor Syst</td>
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<tr>
<td>AGRIC 3 Farm Acct/Mgmt</td>
<td>3.0</td>
<td>AGRIC 36a Diesel Tractor Syst</td>
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</table>
FORESTRY

Minimum units required in discipline — 32

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORES 1 Intro Forestry</td>
<td>3.0</td>
<td>FORES 3 Wildlife Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRIC 10 Intro Calif Agric</td>
<td>3.0</td>
<td>AGRIC 1 Agric Business Mgmt</td>
<td>3.0</td>
</tr>
<tr>
<td>SOILS 1 Intro Soil Science</td>
<td>3.0</td>
<td>FORES 4 Wildlife Law Enforc</td>
<td>3.0</td>
</tr>
<tr>
<td>FORES 2 Natural Resources</td>
<td>3.0</td>
<td>AGRIC 3 Farm Acct and Mgmt</td>
<td>3.0</td>
</tr>
<tr>
<td>ENTM 1 Applied Entomology</td>
<td>3.0</td>
<td>ORNH 4 Orn Shrub/Tree Idnt</td>
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</tr>
<tr>
<td>AGRIC 53a Agric Mechanics</td>
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</table>

ORNAMENTAL HORTICULTURE

Minimum units required in discipline — 32

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORNH 3 Orn Ident/Mater</td>
<td>3.0</td>
<td>ORH 7 Landscape Design</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRIC 10 Intro Calif Agric</td>
<td>3.0</td>
<td>AGRIC 1 Agric Business Mgmt</td>
<td>3.0</td>
</tr>
<tr>
<td>SOILS 1 Intro Soil Science</td>
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<td>AGRIC 46a Care/Maint Turf Eq</td>
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<tr>
<td>ORNH 4 Orn Shrub/Tree Idnt</td>
<td>3.0</td>
<td>ORNH 8 Landscape Gardening</td>
<td>3.0</td>
</tr>
<tr>
<td>ENTM 1 Applied Entomology</td>
<td>3.0</td>
<td>AGRIC 3 Farm Acct/Mgmt</td>
<td>3.0</td>
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<tr>
<td>AGRIC 53a Agric Mechanics</td>
<td>2.0</td>
<td>AGRIC 46b Adv Turf Equipment</td>
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</tbody>
</table>

COURSE DESCRIPTIONS

AGRICULTURE

(AGRIC)

• 1 AGRICULTURAL BUSINESS MANAGEMENT (3 units)

Three hours lecture.
Prerequisite: None.
Changes occurring in agriculture, careers in commercial agricultural businesses and public agricultural service agencies, development and growth of farm related industries, kinds of agricultural businesses, operational characteristics of commercial agricultural industries.

• 2 AGRICULTURAL MARKETING AND ECONOMICS (3 units)

Three hours lecture.
Prerequisite: None.
Changes occurring in agriculture, careers in commercial agricultural businesses and public agricultural service agencies, development and growth of farm related industries, kinds of agricultural businesses, operational characteristics of commercial agricultural industries. Marketing orders and agreements, integration and contract farming; their implications and effects on farming and marketing institutions of California. Development, types and forms of farm related businesses; agricultural businesses considered from standpoint of primary functions, services and problems including such factors as business organization, records, location, production, business with banks, labor and government — emphasis on California farm related industries.

• 3 FARM ACCOUNTING AND MANAGEMENT (3 units)

Two one-hour lectures per week and three hours lecture/laboratory.
Prerequisite: None. AGRIC 1 or ECON 1 recommended.
The student will understand farm accounting systems, farm records, budgets, income tax returns, organization of actual farms. Introduction to computers, reading computer print-outs, and approximately fifteen hours practical training on computer operation.

• 10 INTRODUCTION TO CALIFORNIA AGRICULTURE (3 units)

Three hours lecture.
Prerequisite: None.
An introductory course to agriculture at Bakersfield College which is highly recommended to incoming agriculture majors. A survey of the agriculture industry in California including careers, job requirements, agriculture terminology, and an orientation to the college curriculum.

• 11 AGRICULTURE EMPLOYMENT SEMINAR (1—1 unit)

One hour lecture.
Prerequisite: None.
Offers special related instruction in educational-career guidance; human relations; success factors on-the-job; attitudes; motivation and initiative; grooming; consumer economics; human behavior; man and the organization; current factors related to on-the-job experiences; decision making; achieving career goals; thereby, assisting students to develop the knowledge, attitudes, skills and judgment essential to succeed in the world of work.
AGRICULTURAL BUSINESS MANAGEMENT

1 Introduction to Agricultural Business Management
3 units 3 hrs lect. Prereq: None.

2 Agricultural Economics
3 units 3 hrs lect. Prereq: Level B Reading (MRA 58) classification.

3 Farm Accounting
3 units 3 hrs lect./1½ hrs compt. lab Prereq: None. AG BS 2 or ECON 1 recommended.

4 Operational Use of Agricultural Computers
3 units 3 hrs lect./1½ hrs compt. lab Prereq: None.

5 Agricultural Marketing
3 units 3 hrs lect. Prereq: None.

6 Introduction to Computer Application in Agriculture
3 units 3 hrs lect./1½ hrs compt. lab Prereq: None.

51 Operational Use of Agricultural Microcomputer
1.5 units 3 hrs lect/demonstration for nine wks Prereq: None.

52 Operational Use of Agricultural Software
1.5 units 3 hrs lect/demonstration for nine wks Prereq: None.
12 AGRICULTURAL COOPERATIVE EDUCATION (1—3 units. Limit 6 units.)

Five hours of work per week equals one unit.
Prerequisite: AGRIC 11 (may be taken concurrently).
Program which coordinates on-the-job learning with collegiate curriculum. Number of units earned is dependent upon the number of hours worked per semester. A maximum of three units per semester may be earned with a maximum of six units. The students must be an Agriculture major and the on-the-job experience must be related to student's career objectives.

30 PEST MANAGEMENT PRACTICES (3 units)

Three hours lecture/demonstration. Field Trips by arrangement. 
Prerequisite: ENTOM 1 or CRP 58.
The student will better understand the entire realm of pest management and its impact on the environment. Pests covered include insects and other arthropods, diseases, and weeds. Biological, cultural, pheromones, repellents, attractants, hormones, plant resistance, trapping, and chemical control are discussed as well as chemical safety laws and injury thresholds.

35 AGRICULTURAL CHEMICALS (2 units)

One hour lecture, two hours laboratory and/or selected field trips.
Prerequisites: SOILS 1 and ENTOM 1 recommended.
The nature, purpose, application and effectiveness of agriculture chemicals in commercial nursery operation. Federal, state and local safety regulations are stressed.

36a DIESEL TRACTOR SYSTEMS (2 units)

One hour lecture and three hours laboratory.
Prerequisite: None.
Course for agricultural, technical and transfer students covering the fundamentals, techniques, procedures and practices of working with diesel powered tractors, to include the use of testing equipment and logic when working with electrical, hydraulic and mechanical systems as an integrated unit.

36b ADVANCED DIESEL TRACTOR SYSTEMS (2 units)

One hour lecture and three hours laboratory.
Prerequisite: AGRIC 36a.
Advanced course for agricultural, technical and transfer students covering the fundamentals, techniques, procedures and practices of working with diesel powered tractors, to include the use of testing equipment and logic when working with electrical, hydraulic and mechanical systems as an integrated unit.

46a CARE AND MAINTENANCE OF TURF EQUIPMENT (1 unit)

Three hours lecture, laboratory and demonstration for nine weeks.
Prerequisite: None.
Student will learn how to identify problems encountered when servicing and caring for turf equipment. The student will also learn how to correct problems that are encountered.

46b ADVANCED TURF EQUIPMENT (2 units)

One hour lecture and three hours laboratory.
Prerequisite: None.
Designed for shop mechanics, machinery operators and transfer students in agriculture. The class will cover the theory of operation of turf equipment and small engines. It will also provide practical application of the methods involved in maintenance, repair and overhaul of turf and garden equipment. This class is not for beginning mechanics; students should have a previous class in mechanics or prior experience as a mechanic.

49 SPECIAL PROJECTS IN AGRICULTURE (1—2 units. Limit 2 units)

Three hours per week.
Prerequisite: Two previous courses in AGRIC.
The student will conduct a project individually or in a small group relating to one of the agricultural subjects. The project will be approved and directed by an agricultural instructor.

51 FARM MACHINERY (2 units)

One hour lecture, three hours farm-shop and/or selected field trips.
Prerequisite: None.
Buying, repairing, adjusting and operating farm machinery used on farms in the Kern area. Familiarization with trends in farm mechanization and with Kern County machinery leaders.

52 FARM TRACTORS (2 units)

One hour lecture, three hours laboratory and/or selected field trips.
Prerequisite: None.
Preventive maintenance, buying, repairing, adjusting and operation of farm tractors. Familiarization with the common makes and types of farm tractors and operations of farm tractor dealers.

53a AGRICULTURE MECHANICS (2 units)

One hour lecture and three hours laboratory.
Prerequisite: None.
Basic principles in drawing plans and making a bill of materials, repairing and sharpening tools, farm carpentry, painting, arc welding, acetylene welding and forging.
53a AGRICULTURE MECHANICS (2 units)
One hour lecture and three hours laboratory.
Prerequisite: None.
Basic principles in cold metal skills, sheet metal, plumbing, concrete, electricity, farm tractors and farm machinery.

54a FARM WELDING — GAS (2 units)
One hour lecture, three hours laboratory and/or selected field trips.
Prerequisite: None.
Principles and practices of gas welding as used on farms and in farm machinery repair shops.

54b FARM WELDING — ARC (2 units)
One hour lecture, three hours laboratory and/or selected field trips.
Prerequisite: None.
Principles and practices of electric arc welding as used on farms and in farm machinery repair shops.

62 FARM SURVEYING (2 units)
One hour lecture and two hours laboratory.
Prerequisite: None.
Use of surveying instruments and equipment. Calculation of cuts and fills used in land leveling. Laying out farm building foundations, contours, irrigation ditches, canals and measuring acreages.

64 CONSTRUCTION AND REPAIR (2 units)
One hour lecture and two hours laboratory.
Prerequisite: None.
Covers types, costs, characteristics and uses of construction and repair materials. The application of principles of operation and construction in repairing and building individually owned projects in the shop and on the farm.

65 HOME MECHANICS AND BASIC SHOP SKILLS (2 units)
One hour lecture and two hours laboratory.
Prerequisite: None.
An unstructured course in which students work on their own projects or assigned projects. Instruction in shop equipment (both wood and metal), problems in design, repair and construction; includes maintenance and repair of small gas engines.

71 AGRICULTURAL PEST MANAGEMENT AND CONTROL (2 units)
Two hours lecture/demonstration per week. Field trips by arrangement.
Prerequisite: None.
The student will be able to identify crop pest problems and make recommendations for the safe use of the appropriate insecticide. The student will also understand the basic principles of biological pest control and other control alternatives for crop pests in Kern County.

72 LIVESTOCK DISEASES (1 unit)
Two hours lecture per week for nine weeks.
Prerequisite: None.
A lecture series covering the symptoms and control of diseases of farm animals. The causes and control of animal diseases in relation to economic production and to health.

73 PRINCIPLES OF WATER AND IRRIGATION (1 unit)
Two hours lecture per week for nine weeks.
Prerequisite: None.
A lecture series covering the following topics: soil moisture; responses of crops to soil moisture; soil moisture measurements and irrigation scheduling; water supplies; water application and irrigation methods; land preparation and drainage; special problems of quality, salinity, water penetration; irrigation studies of crops in Kern County.

74 SOILS (1 unit)
Two hours lecture per week for nine weeks.
Prerequisite: None.
A lecture series providing a basic knowledge of soils and their characteristics. An understanding of the significance of fundamental soil properties, the relationship between soils and plants, principles of soil formation, soil types, soil texture and soil structure.

75 WEED CONTROL (1 unit)
Two hours lecture per week for nine weeks.
Prerequisite: None.
A lecture series covering the study of weeds, their behavior and control.

76ad AGRICULTURAL CHEMICAL REVIEW (4 units)
76a—76b—76c—76d (1—1—1—1) equivalent to 76ad.
Sixty-eight hours lecture plus sixteen hours arranged.
Prerequisite: None.
A lecture series designed to familiarize personnel who handle agricultural chemicals with Agricultural Code Regulations. Includes registration, licensing, violations, financial responsibility, hazards and safety measures in handling and using agricultural chemicals. 76a plant growth regulators, 76b defoliation and other harvest aid practices, 76c nematodes and nematicides, 76d herbicides and weed control.
76e AGRICULTURAL CHEMICAL REVIEW (4 units)

76e—76f—76g—76h (1—1—1—1) equivalent to 76eh.

Sixty-eight hours lecture and sixteen hours arranged.
Prerequisite: None.
A lecture series designed to familiarize personnel who handle agricultural chemicals with Agricultural Code Regulations. Includes registration, licensing, violations, financial responsibility, hazards and safety measures in handling and using agricultural chemicals. 76e plant physiology, 76f vertebrate pest control, 76g invertebrate pest control, 76h safety equipment and materials.

90 FARM TRACTOR MECHANIC-TECHNICIAN TRAINING (20 units)

Ten hours lecture and twenty hours laboratory for approximately thirty-six weeks.
Open entry/open exit.
Prerequisite: None.
Designed to prepare students to enter the farm tractor mechanics field at apprentice level. The emphasis is to be on farm tractor overhaul, repair and maintenance. Instruction will also be given in arc welding, gas welding, shop chemicals, air conditioning, electrical equipment, tool usage, record keeping, billing, interviewing and resume preparation.

91 EQUIPMENT OPERATION AND LIGHT DUTY MECHANICS (15 units)

Ten hours lecture and twenty hours laboratory for approximately twenty-two weeks.
Open entry/open exit.
Prerequisite: None.
Designed to train the incoming student to become proficient in the handling, preventive maintenance and light-duty mechanical troubleshooting of all available tractors and implements. When possible, the class will be held outdoors on a training site, and under the direction of the instructor and teaching assistant, the student will be operating all movable equipment.

ANIMAL HUSBANDRY (AN H)

7 INTRODUCTION TO ANIMAL HUSBANDRY (3 units)

Two hours lecture, three hours laboratory and/or selected field trips. One Saturday field trip required.
Prerequisite: None.
Emphasizes beef, dairy cattle, sheep and swine. Surveys livestock production, foreign and domestic. The distribution of meat-producing animals in the United States and factors involving the origin, characteristics and adaptations of important breeds. Designed to provide a basis for the profitable production of livestock.

8 JUDGING (2 units)

One hour lecture, three hours laboratory and/or selected field trips.
Prerequisite: AN H 7.
A beginning course in judging market and breeding classes of dairy beef, sheep and swine.

9 SHEEP PRODUCTION (3 units)

Two hours lecture and three hours laboratory.
Prerequisite: None.
A study of sheep production in the United States, California and Kern County. Breeding, breeds, lambing, selection, shearing and marketing. The commercial production of market lambs in Kern County will be studied.

10 HORSE PRODUCTION (3 units)

Three hours lecture. One Saturday field trip required.
Prerequisite: None.
Status of the horse industry; types and breeds; selection, care and management of the light horse; their place and use in California and the United States.

11 ADVANCED HORSE PRODUCTION (3 units)

Three hours lecture. One Saturday field trip required.
Prerequisite: AN H 10.
Management of breeding and training stable, nutrition, health, training and transportation of horses.

40 BEEF PRODUCTION (3 units)

Three hours lecture and/or selected field trips.
Prerequisite: None.
Managing the cow herd; selecting replacement heifers and bulls; disease and reproduction problems; climatic adaptability, growth and fattening; quality of beef as affected by age, condition and type; planning livestock layouts, study of production costs, record-keeping, beef cattle marketing and trends in the cattle industry.

41 APPLIED ANIMAL NUTRITION (3 units)

Three hours lecture and/or selected field trips.
Prerequisite: AN H 7.
Fundamentals of feeds and feeding including constituents of foods, digestive systems of farm animals and their utilization of various foods. Problems of balancing rations.

42 FEEDLOT MANAGEMENT (3 units)

Two hours lecture and three hours laboratory.
Prerequisites: AN H 7 and 41.
An introduction to the feedlot business. All facets of the industry including: planning the layout, selecting equipment, purchasing cattle and feed disease control. Nutrition and marketing will be studied.
43 LIVESTOCK DISEASES (3 units)
Three hours lecture and/or selected field trips.
Prerequisite: None.
An introductory course in animal hygiene and sanitation. The causes, symptoms and prevention of common livestock diseases and parasites are emphasized.

45 ANATOMY AND PHYSIOLOGY OF FARM ANIMALS (3 units)
Three hours lecture. One Saturday field trip required.
Prerequisite: None.
An introductory course in anatomy and physiology of horses, cattle, swine, sheep and poultry.

50 BREEDING AND ARTIFICIAL INSEMINATION (3 units)
Two hours lecture and three hours laboratory.
Prerequisites: AN H 7 and 8.
Advanced study and practical application of breeding principles and artificial insemination of farm animals; the collection, processing and handling of semen; the job and responsibilities of the technician; the management and sanitation practices affecting reproductive efficiency.

70 ARTIFICIAL INSEMINATION OF CATTLE (1 unit)
Twenty-four hours lecture/demonstration.
Prerequisite: None.
The practical application of breeding principles and artificial insemination of cattle; the collection, processing and handling of semen; the job and responsibilities of the technician; the management and sanitation practices affecting reproductive efficiency.

71 DISEASES OF BEEF AND DAIRY CATTLE (1 unit)
Two hours lecture per week for nine weeks.
Prerequisite: None.
The causes, symptoms, prevention and recommended treatment of the common disease problems in beef and dairy cattle in Kern County.

72 DISEASES OF HORSES (1 unit)
Two hours lecture per week for nine weeks.
Prerequisite: None.
Designed to meet the needs of the horse owner or stable manager. The course will be taught by a graduate veterinarian who is currently practicing veterinary medicine in Kern County. Content will include prevention, symptoms, control and treatment of diseases of horses.

74 EQUINE NUTRITION (1 unit)
Two hours lecture per week for nine weeks.
Prerequisite: None.
A series of lectures covering the various phases of horse nutrition. An evening class designed for the adult horse owner or trainer.

75 FITTING AND SHOWING BEEF CATTLE (1 unit)
One hour lecture and two hours laboratory for nine weeks.
Prerequisite: None.
Designed primarily for adult leaders and parents of 4H, F.F.A. or Junior Farmer beef exhibitors. Covers the techniques of training, fitting and showing beef animals.

76 SELECTING, FEEDING, FITTING AND EXHIBITING STEERS AND LAMBS (2 units)
One hour lecture and two hours laboratory for twelve weeks.
Prerequisite: None.
This course is designed for adult leaders and parents of 4H and F.F.A. livestock exhibitors. It will cover the techniques of selecting feeders, feeding, fitting and exhibiting lambs and steers.

77 DISEASES OF SHEEP AND GOATS (1 unit)
Two hours lecture per week for nine weeks.
Prerequisite: None.
The characteristics of the normal animal. The causes, symptoms, prevention and recommended treatment of the common disease problems in sheep and goats in Kern County.

78 SELECTING, FEEDING, FITTING AND EXHIBITING LAMBS (1 unit)
Three hours lecture/demonstration for six weeks. One Saturday morning session may be required.
Prerequisite: None.
Designed for adult leaders and parents of 4H and F.F.A. livestock exhibitors. It will cover the techniques of selecting feeders, feeding, fitting and exhibiting lambs.

CROP SCIENCE (CRP S)

1 PRINCIPLES OF CROP PRODUCTION (3 units)
Two hours lecture, three hours laboratory and/or selected field trips. One Saturday field trip required.
Prerequisite: None.
The student will understand the fundamental practices for field and vegetable crops: basic botany, classification of plants, soils, fertilizers, irrigation, pest control, and crop rotation as well as specific practices for a crop such as sugar beets.
2 ALFALFA AND OTHER FORAGE CROPS (3 units)

Two hours lecture, three hours laboratory and/or selected field trips. Prerequisite: None.

3 WEED CONTROL (3 units)

Two hours lecture, three hours laboratory/demonstration and field trips by arrangement.
Prerequisite: None.
The student will be able to identify weeds common to the area and to know the various types of control, weed control chemicals and equipment for cultivated crops.

5 VEGE TABLE PRODUCTION (3 units)

Two hours lecture, three hours laboratory and/or selected field trips.
Prerequisite: None.
The principles and practices of vegetable crop production. A study of the methods used in seeding, propagation and culture of vegetables and the application of the principles underlying vegetable production techniques.

14 COTTON PRODUCTION (3 units)

Two hours lecture and three hours laboratory and/or selected field trips.
Prerequisite: None.
History and world production, varieties and breeding; fertilization, disease and control, irrigating problems, insect control, defoliation, harvesting, classing and research studies. Visits to large scale cotton farms, government cotton offices, marketing associations, experimental stations, cotton gins, oil mills and compresses. Emphasis on cotton production and marketing in Kern County.

26 ORGANIC GARDENING (2 units)

One hour lecture and three hours by arrangement. Prerequisite: None.
Designed for students interested in gardening and its impact on the environment. Deals with soils, plant nutrition, composting, mulching, pest control, and general gardening without the use of synthetic chemicals.

1 APPLIED ENTOMOLOGY (3 units)

Two hours lecture, three hours laboratory and/or selected field trips. Prerequisite: None.
An introduction to the classification, life history, morphology, physiology and ecology of insects, insecticides and their applications.

1 INTRODUCTION TO FORESTRY (3 units)

Three hours lecture and/or related field trips. Prerequisite: None.
Problems in forestry and forestry management. Includes study of forest diseases and insect problems.

2 NATURAL RESOURCES (3 units)

Three hours lecture and/or related field trips. Prerequisite: None.
A study of our natural resources and the conservation of those uncaptured natural stores which are useful to mankind. Resources covered are water, soil, forests, grasslands, wild-animal life and minerals.

3 WILDLIFE MANAGEMENT (3 units)

Three hours lecture. Prerequisite: None.
Foundations of wildlife production. The identification, life histories and ecology of important wildlife species — fur bearers, water fowl and fish.

4 WILDLIFE LAW ENFORCEMENT (3 units)

Three hours lecture. Prerequisite: None.
A brief history of the development of wildlife law enforcement. State functions and jurisdiction; federal jurisdiction, federal wildlife laws, federal versus state jurisdiction; rights of the private citizen. Types of violations and the role of the law enforcement officer. The function of the officer, including arrests, preparation of evidence, interviewing and court appearances.
<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Lect Hours</th>
<th>Lab Hours</th>
<th>Field Trips</th>
<th>Prereq</th>
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<tr>
<td>4 Principles of Crop Production</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>+</td>
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<tr>
<td>5 Forage Crops</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>+</td>
<td>Crp S 1 is recommended</td>
</tr>
<tr>
<td>6 Row Crops</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>+</td>
<td>None</td>
</tr>
<tr>
<td>7 Vegetable Production</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>+</td>
<td>None</td>
</tr>
<tr>
<td>8 Weed Control</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>200 General Crop Skills</td>
<td>8</td>
<td>5</td>
<td>8</td>
<td>+</td>
<td>None</td>
</tr>
<tr>
<td>300 Applied Crop Production</td>
<td>8</td>
<td>5</td>
<td>8</td>
<td>+</td>
<td>CRP S 200 or eval. by instructor.</td>
</tr>
</tbody>
</table>
1 PRINCIPLES OF FRUIT GROWING (3 units)
Two hours lecture, three hours laboratory and/or selected field trips.
Prerequisite: None.
A survey of the fruit growing industry including climatic influences, cultural practices and varieties.

2 PRINCIPLES OF FRUIT GROWING (3 units)
Two hours lecture, three hours laboratory and/or selected field trips.
Prerequisite: HORT 1.
Principles of propagation, rootstocks, budding and grafting. Pruning and training young trees and vines. Pollination, harvesting and marketing of California fruits and nuts.

70 VITICULTURE — GRAPE GROWING (1 unit)
Two hours lecture per week for nine weeks.
Prerequisite: None.
Principles underlying pruning, training, grafting and propagation of vines; establishment of vineyards. Economic and scientific principles of recommended vineyard management practices including irrigation, mineral and carbohydrate nutrition, flower development and fruit set, virus and fungal diseases and insect control.

71 VITICULTURE — GRAPE PRODUCTION (3 units)
Three hours lecture/demonstration.
Prerequisite: None.
Principles underlying pruning, training, grafting, and propagation of vines; establishment of vineyards. Economic and scientific principles of recommended vineyard management practices including irrigation, mineral and carbohydrate nutrition, flower development and fruit set, virus and fungal diseases, and insect control. Means of improving grape quality through thinning, girdling and plant growth regulations. Grape varieties, grape fruitfulness and forecasting.

72 COMMERCIAL NURSERY (3 units)
Three hours lecture, special assignments and field trips by arrangement.
Prerequisite: None.
Commercial nursery operations. Propagation, propagation media, nursery layout, seed identification, seedage, cuttage, plant structure, rooting aids, transplanting, potting, balling, irrigation and pest control. Bedding plants, greenhouse plants, trees and shrubs. Field trips: (a) local nurseries, (b) Monrovia Nursery, (c) Hines Nursery, (d) Gallup and Stribling International.

73 LANDSCAPE AND CONSERVATION (3 units)
Three hours lecture.
Prerequisite: None.
A survey of Southern California landscape and conservation problems. Emphasis on protective measures for natural resources. Consideration of landscape design and elements and historical landmarks of Southern California.

74 LAWN AND GARDEN CARE (3 units)
Two hours lecture, three hours laboratory.
Prerequisite: None.
Principles of turfgrass management; grass types, soil and water requirements. Principles of vegetable, flower and ground cover cultivation. Principles of pest control and underside management practices.

75 IDENTIFICATION OF CALIFORNIA WILDLIFE (3 units)
Three hours lecture.
Prerequisite: None.
A survey of game birds, fish and mammals of California and the Western United States. Characteristics of game animals and protected species. Practice in identifying animals in their environment. Emphasis on protecting species which are in danger of extinction.

76 FORESTRY SKILLS (3 units)
Three hours lecture/special assignments and field trips by arrangement.
Prerequisite: FORES 1 or evaluation by instructor.
The student will be able to identify and use the tools and equipment which will prepare them for entry into technician levels of forestry work.

77 WILDLAND FIRE MANAGEMENT (3 units)
Three hours lecture.
Prerequisite: FORES 1 or 2 (may be taken concurrently).
The student will understand the physical theories of wildland fire, the methodology of wildland fire suppression, and the use and maintenance of the tools required to suppress a wildland fire. (Formerly Resource Fire Control.)

78 PRINCIPLES OF VEGETABLE GROWING (3 units)
Two hours lecture, three hours laboratory and/or selected field trips.
Prerequisite: None.
A survey of the vegetable growing industry including climatic influences, cultural practices and varieties.

79 PRINCIPLES OF HERBICIDE USE (3 units)
Two hours lecture, three hours laboratory and/or selected field trips.
Prerequisite: None.
Identification, habits of growth, culture and landscape use of ground covers, vines, shrubs, annuals and biennials adapted to gardens of the central valley of California.

80 CITRUS HORTICULTURE (3 units)
Three hours lecture.
Prerequisite: None.
Principles underlying pruning, training, grafting and propagation of citrus. Establishment of citrus orchards. Economic and scientific principles of recommended orchard management practices including irrigation, mineral and carbohydrate nutrition, flower development and fruit set, virus and fungal diseases, and insect control.
MECHANIZED AGRICULTURE

1 Introduction to Mechanized Agriculture
   3 units + field trips

2 Beginning Mechanized Agriculture
   3 units 2 hrs lect/3 hrs lab + field trips

3 Tractor Service and Operation
   3 units 2 hrs lect/3 hrs lab + field trips

4 Machinery Service and Operation
   3 units 2 hrs lect/3 hrs lab + field trips

5 Farm Power
   2 units 1 hr lect/3 hrs lab + field trips

6 Agricultural and Automotive Engines
   2 units 2 hrs lect/2 hrs lab + field trips

7 Mobile Hydraulics
   2 units 2 hrs lect/2 hrs lab + field trips

8 Power Transmissions
   2 units 2 hrs lect/2 hrs lab + field trips

9 Small Engine and Equipment Repair
   2 units 1 hr lect/3 hrs lab

10 Diesel Tractors
    2 units 2 hrs lect/2 hrs lab

11 Farm Welding---Oxyacetylene
    2 units 1 hr lect/3 hrs lab

12 Farm Welding--Electric Arc
    2 units 1 hr lect/3 hrs lab

200 Beginning Mechanized Agriculture
   8 units 5 hrs lect/8 hrs lab + field trips

300 Tractor Service and Operation
   8 units 5 hrs lect/8 hrs lab + field trips

400 Machinery Service and Operation
   8 units 5 hrs lect/8 hrs lab + field trips

Prereq: None.

Prereq: Level B Reading (MRA 58) classification.

Prereq: MC AG 2 or eval. by instructor.

Prereq: MC AG 3 or eval. by instructor.

Prereq: MC AG 2 or eval. by instructor.

Prereq: MC AG 5 or evaluation by instr.

Prereq: MC AG 3 or evaluation by instr.

Prereq: MC AG 7 or evaluation by instr.

Prereq: MC AG 5 or 6 or eval by instr.

Prereq: MC AG 6 and 7 or 8 or eval/instr.

Prereq: MC AG 2 or 200 or eval by instr.

Prereq: MC AG 2 or MC AG 200 or eval/ins.

Prereq: None.

Prereq: MC AG 200 or eval by instructor.

Prereq: MC AG 300 or eval by instructor.
• **30a TURF MANAGEMENT (2 units)**

One hour lecture and two hours laboratory.  
Prerequisite: None.  
Practice in turf construction, maintenance and management including golf greens, athletic fields and park lawns.

• **30b TURF DESIGN (2 units)**

One hour lecture and two hours laboratory.  
Prerequisite: None.  
Practice in green design, construction and maintenance. Identification of compatible plant material and accessory structures and their relationship to turf, including golf greens, athletic fields and park lawns.

• **35a ORNAMENTAL HORTICULTURE (1 unit)**

Eighteen hours of instruction. Lecture.  
Prerequisite: None.  
Identification, habits of growth, culture and landscape use of plants commonly found on school campuses and adapted to the Central Valley of California. Principles of sexual propagation (seeds) and asexual propagation (cuttings, layering, divisions, and separation) of common house and landscaping plants.

• **42 FLORAL SHOP OPERATION (2 units)**

One hour lecture and two hours laboratory.  
Prerequisite: **ORN 1140**.  
Designed to develop interest in the retail floral industry, an appreciation of the arts and skills necessary in the making of attractive and appropriate floral arrangements for seasonal occasions; application and practice techniques dealing with the retail store.

• **75a PLANT MAINTENANCE AND IDENTIFICATION (1.5 units)**

Three hours lecture/demonstration for nine weeks.  
Prerequisite: none.  
The student will learn the identification of, habits of growth, propagation of, culture and landscape use of ground covers, vines and dwarf plants (1½'-3') adapted and used in landscapes of the central valley of California.

• **75b PLANT MAINTENANCE AND IDENTIFICATION (1.5 units)**

Three hours lecture/demonstration for nine weeks.  
Prerequisite: None.  
The student will learn the identification of, habits of growth, propagation of, culture and landscape use of small plants (4'-5') and medium plants (6'-8') adapted and used in landscapes of the central valley of California.
75c PLANT MAINTENANCE AND IDENTIFICATION (3 units)

Three hours lecture/demonstration.
Prerequisite: None.
The student will learn the identification of, habits of growth, propagation of, culture and landscape use of large plants (12'—25'), small trees (12'—25'), large trees (50' or more) and palms adapted and used in landscapes of the central valley of California.

77a CARE AND MAINTENANCE OF TURF EQUIPMENT (1 unit)

One hour lecture, two hours laboratory for nine weeks.
Prerequisite: None.
The student will learn how to identify and correct problems encountered when servicing and caring for turf equipment.

SOILS

• 1 INTRODUCTION TO SOIL SCIENCE (3 units)

Two hours lecture, three hours laboratory and/or selected field trips.
Prerequisite: None.
Problems pertaining to the soil which are important in the profitable production of crops, physical properties of soils, fertilizers, crop rotation, erosion and alkali control, cultivation problems and irrigation.

• 2 AGRICULTURAL WATER (2 units)

Two hours lecture.
Prerequisite: None.
A study of the use of water by agriculture to include hydrology, water supply, irrigation systems, and water quality. Students desiring laboratory and field experience should also enroll in the optional lab, SOILS 2L, concurrently.

• 2L AGRICULTURAL WATER LABORATORY (1 unit)

Three hours per week of lab experiments and demonstrations.
Prerequisite: SOILS 2 (preferably taken concurrently).
Allows the student to use equipment and principles that are covered by the lecture course. There will also be field trips to water supply and distribution facilities.

• 3 PLANT NUTRITION AND FERTILIZERS (3 units)

Three hours lecture.
Prerequisite: SOILS 1.
The student will be able to determine the nutritional requirements of plants and understand methods used to meet those requirements.

• 4 IRRIGATION SYSTEMS (2 units)

Two hours lecture.
Prerequisite: None.
The student will understand the principles and applications of pumps, water conveyance and water application. The student will be able to design and test various types of irrigation systems for both agriculture and landscape situations.

• 4L IRRIGATION SYSTEMS LAB (1 unit)

Three hours laboratory.
Prerequisite: SOILS 2 or 4 (preferably concurrently).
The student will understand the principles and application of pumps, water conveyance and water application. The student will be able to design and test various types of irrigation systems for both agriculture and landscape situations.

• 5 RECLAMATION AND SOIL AMENDMENTS (2 units)

Two hours lecture.
Prerequisite: None.
The student will be able to identify and treat soil problems related to salinity, excess sodium, poor water penetration and excessive alkalinity.

• 6 PLANT ECOLOGY (3 units)

Two hours lecture and three hours laboratory.
Prerequisites: SOILS 1, 2, BIOL 16.
The student will understand the relationships between cultivated plants and plant disease, the climate, the soil-water system and environmental pollution.

AIR CONDITIONING REFRIGERATION
See Industrial Education

ANATOMY
See Life Science

ANTHROPOLOGY
See Behavioral Sciences

APPLIANCE REPAIR
See Industrial Education

APPRENTICESHIP
See Industrial Education

ARCHITECTURE
See Physical Science
200 Fundamentals of Nursery Management and Plant Production
8 units 5 hrs lect/8 hrs lab + field trips  Prereq: None.

300 Landscape Installation and Maintenance
8 units 5 hrs lect/8 hrs lab + field trips  Prereq: ORN H 200 or eval by instructor.
ART

CERTIFICATE OF ACHIEVEMENT

PHOTOGRAPHY CERTIFICATE OF ACHIEVEMENT

This program will offer the serious student in photography an opportunity to specialize in an intense individualized one year or more of study. The student will be enrolled in our regular courses of still photography, but upon a notice of an enrollment in this program, the level of expectation and individual contact will be increased. The one year program is based upon scheduling.

Minimum units required — 24

Required Courses

| ART 17ab Elem Photography | UN 3.0 | ART 17ef Color Photography | UN 3.0 |
| ART 17cd Intermed Photog | UN 3.0 | ART 17gh Adv Photography | UN 3.0 |
| ART 3ab 3cd or 3ef Design | UN 3.0 | ART 17ij Photographic Problems | UN 3.0 |
| ART 1 30a, 30b, 30c Art History or Art Appreciation | UN 3.0 | ART 2ab Basic Drawing | UN 3.0 |

ASSOCIATE OF ARTS DEGREE PROGRAM

Students must comply with the requirements as shown in the catalog under Graduation Requirements. Counselors/advisors will assist the student in planning for an Associate degree.

Minimum units required in discipline — 18

Required Courses (Minimum of 9 units)

| ART 2ab Basic Drawing | UN 3.0 | ART 1 Appreciation | UN 3.0 |
| OR | OR | OR | OR |
| ART 2ef Figure Drawing | UN 3.0 | ART 30a Ancient Mediterranean Art | UN 3.0 |
| ART 3ab Basic Design | UN 3.0 | ART 30b Medieval Renaissance | UN 3.0 |
| OR | OR | OR | OR |
| ART 3cd 3 Dimensional Design | UN 3.0 | ART 30c Baroque to Modern Art | UN 3.0 |
| OR | OR | OR | OR |
| ART 3ef Fundamentals/Color | UN 3.0 |

Electives (Minimum of 9 units concentrated or distributed)

ART 2, 3, 4 and 5 Painting and Drawing Series
ART 9 Glass Design Series
ART 8 Jewelry Series
ART 7 Ceramics Series
ART 11, 12 Sculpture Series
ART 14, 15 Graphic Series
ART 16, 17, 18 Photography Series
ART 20 Porta Pac and Editing
ART 30, 32, 33, 34, 35, 36, 40 Art History Series

COURSE DESCRIPTIONS

• 1 ART APPRECIATION (3 units)

Three hours lecture.
Prerequisite: None.
An introductory course for both majors and non-majors. Emphasizes art processes as a means of developing useful criteria for evaluation and enjoyment of visual aesthetic form.

• 2ab BASIC DRAWING (3 units)

2a—2b (1.5—1.5) equivalent to 2ab.
Six hours lecture and studio.
Prerequisite: None.
A study of realistic, abstract and non-objective drawing as related to form perception. Perspective drawing. Understanding of art elements in composition and expression.

• 2cd ADVANCED DRAWING (3 units)

2c—2d (1.5—1.5) equivalent to 2cd.
Six hours lecture and studio.
Prerequisite: Grade of “C” or higher in ART 2ab.
A further study of realistic, abstract and non-objective drawing as related to form perception. Advanced projects in basic drawing techniques.

• 2ef FIGURE DRAWING (3 units)

2e—2f (1.5—1.5) equivalent to 2ef.
Six hours lecture and studio.
Prerequisite: None.
Models posed in rapid and extended studies. Use of pencil, charcoal, chalk, brush and ink, conte crayon, lithograph crayon, charcoal and gouache.
• 2gh ADVANCED FIGURE DRAWING (3 units)
2g—2h (1.5—1.5) equivalent to 2gh.
Six hours lecture and studio.
Prerequisite: A grade of "C" or higher in ART 2ef.
Advanced study in exploration of the figure using posed models as subject matter.

• 2ij ADVANCED PROJECTS IN DRAWING (3 units)
2i—2j (1.5—1.5) equivalent to 2ij.
Six hours lecture and studio.
Prerequisite: ART 2cd or 2gh with a grade of "C" or higher.
A continued study of drawing involving use of wet as well as dry media and color as well as black and white. The philosophical implications of drawing, as well as purely aesthetic concerns, will be emphasized and deeper analysis of composition and style in that context will be the main objective of the course.

• 3ab BASIC DESIGN (3 units)
3a—3b (1.5—1.5) equivalent to 3ab.
Six hours lecture and studio.
Prerequisite: None.
A course in the basic principles of design. Problems of the visual field: dark and light, color, texture, balance and size relationships. Emphasis is on two-dimensional work.

• 3cd THREE DIMENSIONAL DESIGN (3 units)
3c—3d (1.5—1.5) equivalent to 3cd.
Six hours lecture and studio.
Prerequisite: None.
A basic study of the visual elements as they relate to three dimensional design.

• 3ef FUNDAMENTALS OF COLOR (3 units)
3e—3f (1.5—1.5) equivalent to 3ef.
Six hours lecture and studio.
Prerequisite: None.
A course in the fundamentals of color for artists and designers. The Munsell theory and other color systems will be studied with application for the best methods of mixing and relating colors.

• 4ab BASIC PAINTING — ACRYLIC MEDIA (3 units)
4a—4b (1.5—1.5) equivalent to 4ab.
Six hours lecture and studio.
Prerequisite: None.
An introduction to pictorial composition using various techniques, materials and acrylic media.

• 4cd ADVANCED PAINTING — ACRYLIC MEDIA (3 units)
4c—4d (1.5—1.5) equivalent to 4cd.
Six hours lecture and studio.
Prerequisite: ART 4ab.
Advanced problems in acrylic painting.

• 4ef WATER COLOR PAINTING (3 units)
4e—4f (1.5—1.5) equivalent to 4ef.
Six hours lecture and studio.
Prerequisite: None.
A course in techniques of still life, landscape and imaginative painting as related to the problems of water color.

• 4gh FIGURE PAINTING (3 units)
4g—4h (1.5—1.5) equivalent to 4gh.
Six hours lecture and studio.
Prerequisite: ART 2ab or 2ef.
The student will learn to accurately paint the human form and be able to place the figure in harmony with its environment. Most work will be done in color and some in black and white. Oil painting with brushes as well as other techniques will be studied. (Formerly ART 5ef.)

• 5ab BASIC OIL PAINTING (3 units)
5a—5b (1.5—1.5) equivalent to 5ab.
Six hours lecture and studio.
Prerequisite: None.
Introduces the student to basic principles of oil color mixing and color harmony. Basic composition also will be taught, particularly those aspects that deal with grouping color movements on both the picture plane and the illusionary space.
• 5cd BASIC OIL PAINTING (3 units)
 5c—5d (1.5—1.5) equivalent to 5cd.
Six hours lecture and studio.
Prerequisite: ART 5ab.
Introduces the student to the various painting supports, grounds, paints, oils, dryers, and varnishes that are employed in the craft. Students are exposed to composition concepts that will provide the basis for all paintings, regardless of subject matter.

• 5ef INTERMEDIATE OIL PAINTING (3 units)
 5e—5f (1.5—1.5) equivalent to 5ef.
Six hours lecture and studio.
Prerequisite: ART 5cd.
A further study of illusions in space and movement as they are incorporated into painting for expressive impact. Subject matter may be quite varied as may painting styles. Experimentation will be encouraged within a structured program.

• 5gh ADVANCED OIL PAINTING (3 units)
 5g—5h (1.5—1.5) equivalent to 5gh.
Six hours lecture and studio.
Prerequisite: ART 5ef.
Under the guidance of the instructor, the student will develop personal art assignments that will move the student toward individual objectives in painting. Creativity will be especially encouraged, but basic concepts will not be ignored.

• 6ab CERAMICS — HANDBUILDING (3 units)
 6a—6b (1.5—1.5) equivalent to 6ab.
Six hours lecture and studio.
Prerequisite: None.
Handbuilding is the oldest form of ceramic art. Includes the fundamentals of handbuilt ceramics. The students should gain insights into the ancient and the modern methods of producing ceramic pieces without the use of a potter's wheel.

• 6cd CERAMICS — ADVANCED HANDBUILDING (3 units)
 6c—6d (1.5—1.5) equivalent to 6cd.
Six hours lecture and studio.
Prerequisite: ART 6ab.
Deals in the more sophisticated techniques of handbuilt ceramics. Students will work with a variety of clay bodies and will be introduced to the process of making and testing glazes. Students will work with the raku method and will also participate in a primitive kiln building and firing.

• 7ab CERAMICS — BASIC (3 units)
 7a—7b (1.5—1.5) equivalent to 7ab.
Six hours lecture and studio.
Prerequisite: None.
Designed to acquaint the student with basic ceramic materials and techniques such as wheel throwing, handbuilding, glaze application and design techniques.

• 7cd CERAMICS — INTERMEDIATE (3 units)
 7c—7d (1.5—1.5) equivalent to 7cd.
Six hours lecture and studio.
Prerequisite: ART 7ab.
Designed to allow advanced work in basic techniques. Glaze calculation and kiln firing are explored.

• 7ef CERAMICS — ADVANCED (3 units)
 7e—7f (1.5—1.5) equivalent to 7ef.
Six hours lecture and studio.
Prerequisite: ART 7cd.
Designed to offer the student an opportunity to further develop basic ceramic skills. Advanced work in glaze calculations, kiln firing and clay constructions.

• 7gh CERAMICS — ADVANCED (3 units)
 7g—7h (1.5—1.5) equivalent to 7gh.
Six hours lecture and studio.
Prerequisite: ART 7ef.
Designed to offer the student special problems in advanced ceramic techniques. Individual research problems are explored such as kiln building, wheel building and production techniques.

• 8ab JEWELRY (3 units)
 8a—8b (1.5—1.5) equivalent to 8ab.
Six hours lecture and studio.
Prerequisite: None.
Fundamental techniques and finishing of jewelry and other articles in the soft metals, such as brass, copper, gold, and sterling silver.

• 8cd JEWELRY (3 units)
 8c—8d (1.5—1.5) equivalent to 8cd.
Six hours lecture and studio.
Prerequisite: ART 8ab.
A continuation of beginning jewelry with an explanation of the "lost wax process," experimental casting and stone setting.
• 8ef ADVANCED JEWELRY (3 units)
  8e—8f (1.5—1.5) equivalent to 8ef.
  Six hours lecture and studio.
  Prerequisite: ART 8cd.
  A continuation of ART 8cd with emphasis on electroforming, electroplating and surface embellishment. Individual projects are encouraged for all students stressing imaginative and creative interests.

• 8gh ADVANCED JEWELRY (3 units)
  8g—8h (1.5—1.5) equivalent to 8gh.
  Six hours lecture and studio.
  Prerequisite: ART 8ef.
  A continuation of ART 8ef with emphasis on independent study, special problems and marketing procedures.

• 9ab GLASS DESIGN — GLASS BLOWING (3 units)
  9a—9b (1.5—1.5) equivalent to 9ab.
  Two hours lecture and demonstration and four hours studio.
  Prerequisite: None.
  A basic course to acquaint students in the workings of glass, cold-flat and hot-blown glass. The flat glass portion will be devoted to the execution and production of a stained glass window either by lead came method or copper foil. The hot glass portion is an introduction of basic techniques of off-hand blown glass. Each portion will enable students to use glass as an expressive medium.

• 9cd ADVANCED GLASS DESIGN (3 units)
  9c—9d (1.5—1.5) equivalent to 9cd.
  Two hours lecture and demonstration and four hours studio.
  Prerequisite: ART 9ab.
  Advanced techniques of off-hand glass blowing. Gives students extended exploration in the medium of art glass. Includes more advanced blowing techniques, exploration of color, decoration and studio construction. Also included are sections on kiln-fired glass (slumping, fusing and painting) and cold glass working and stained glass.

• 11ab SCULPTURE (3 units)
  11a—11b (1.5—1.5) equivalent to 11ab.
  Six hours lecture and studio.
  Prerequisite: None.
  An exploration of the three dimensional materials and their relationships to design and form. Creative expression is explored through the manipulations of clay, wood, metal and plaster.

• 11cd ADVANCED SCULPTURE (3 units)
  11c—11d (1.5—1.5) equivalent to 11cd.
  Six hours lecture and studio.
  Prerequisite: ART 11ab.
  Advanced study in the exploration of form; using clay, plaster, wood and wax for bronze casting.

• 11ef TECHNIQUES IN BRONZE CASTING (3 units)
  11e—11f (1.5—1.5) equivalent to 11ef.
  Six hours lecture and studio.
  Prerequisite: None.
  The student will be able to produce a bronze casting, using the “lost wax” method of casting. The student will be able to fabricate a wax pattern, sprue the pattern and invest the pattern. After producing the cast, the student will be able to clean the finished bronze.

• 11gh ADVANCED TECHNIQUES IN BRONZE CASTING (3 units)
  11g—11h (1.5—1.5) equivalent to 11gh.
  Six hours lecture and studio.
  Prerequisite: ART 11ef.
  A continuation of 11ef. The student will be able to patina and mount the casting through a variety of possible methods.

• 12ab FIGURE SCULPTURE (3 units)
  12a—12b (1.5—1.5) equivalent to 12ab.
  Six hours lecture and studio.
  Prerequisite: None.
  Emphasis on learning to see form. Work from the nude model in clay and plaster.

• 12cd ADVANCED FIGURE SCULPTURE (3 units)
  12c—12d (1.5—1.5) equivalent to 12cd.
  Six hours lecture and studio.
  Prerequisite: None.
  Advanced work in clay and plaster using the nude model.

• 13ab BEGINNING PRINTMAKING: SILK SCREEN (3 units)
  13a—13b (1.5—1.5) equivalent to 13ab.
  Six hours lecture and studio.
  Prerequisite: None.
  An exploration of the expressive potential of the fine art print through the knowledge gained in the printing techniques of serigraphy and relief printing.
• 13cd BEGINNING PRINTMAKING: LITHOGRAPHY AND INTAGLIO
(3 units)

13c—13d (1.5—1.5) equivalent to 13cd.
Six hours lecture and studio.
Prerequisite: None.
An exploration of the expressive potential of the fine art print through the knowledge gained in printing techniques of lithography and intaglio.

• 13ef ADVANCED PRINTMAKING (3 units)

13e—13f (1.5—1.5) equivalent to 13ef.
Six hours lecture and studio.
Prerequisite: ART 13cd.
A continuation of ART 13cd with emphasis on multi-color plates and exploratory techniques.

• 13gh ADVANCED PRINTMAKING (3 units)

13g—13h (1.5—1.5) equivalent to 13gh.
Six hours lecture and studio.
Prerequisite: ART 13ef.
A continuation of ART 13ef with emphasis on independent study, special problems and exhibition procedures.

• 14ab LETTERING (3 units)

14a—14b (1.5—1.5) equivalent to 14ab.
Six hours lecture and studio.
Prerequisite: None.
A study of basic letter forms. Also includes creative lettering design and poster design. Introduction to lettering for advertising and reproductions.

• 14cd GRAPHIC DRAWING (3 units)

14c—14d (1.5—1.5) equivalent to 14cd.
Six hours lecture and studio.
Prerequisite: None.
The student will learn to accurately draw such objects as cars, appliances, utensils, dishes, room interiors and be able to relate these to people in correct scale. Most work will be done in line and some projects in color. Both free-hand and instrument drawing will be studied.

• 14ef GRAPHIC ILLUSTRATION (3 units)

14e—14f (1.5—1.5) equivalent to 14ef.
Six hours lecture and studio.
Prerequisite: None.
Illustration for fiction, science fiction, historical, children's stories, medical and cartooning. Emphasis on research for authenticity as well as creative and original approaches in presentation and technique. Consideration given to production methods.

• 15ab GRAPHIC DESIGN (3 units)

15a—15b (1.5—1.5) equivalent to 15ab.
Six hours lecture and studio.
Prerequisite: None.
A study of the tools, materials and techniques which are incorporated into the development of printed communications. The designing of graphics with production methods in mind.

• 15cd ADVERTISING GRAPHICS (3 units)

15c—15d (1.5—1.5) equivalent to 15cd.
Six hours lecture and studio.
Prerequisite: None.
A study of areas translatable to symbolic representation and the methods for organizing such visual images for maximum communication. Emphasis on design, integration of image with type and unusualness of approach.

• 15ef GRAPHIC TECHNIQUES (3 units)

15e—15f (1.5—1.5) equivalent to 15ef.
Six hours lecture and studio.
Prerequisite: None.
A basic course in the rendering of people, objects, products and environments in various media such as water color, casein, acrylic, ink, dyes, etc. and in experimental ways such as tearing or wrinkling paper, using cotton, toothbrushes, sticks, straws, or fingers for applying media and mixing paints with sand, plaster, or glue, etc.

• 16ab FILM MAKING (3 units)

16a—16b (1.5—1.5) equivalent to 16ab.
Six hours lecture and studio.
Prerequisite: None.
A study of motion picture equipment, cinema techniques, script development and synchronization of sound and film. It is an elementary course starting with the basic ideas of film, script and sound and providing for individual and group experiences in cinematography.

• 16cd ADVANCED FILM MAKING (3 units)

16c—16d (1.5—1.5) equivalent to 16cd.
Six hours lecture and studio.
Prerequisite: ART 16ab.
A continuation of ART 16ab with the student encouraged to determine his/her own direction and relationship to the medium. Primary emphasis will be on the development of the individual as an independent, creative filmmaker.
17ab ELEMENTARY PHOTOGRAPHY (3 units)

17a—17b (1.5—1.5) equivalent to 17ab.
Six hours lecture and studio.
Prerequisite: None.
The student will understand the basic principles of cameras, optics, light, film and development, exposure and exposure meters and enlarging. The student will complete photographic assignments which will emphasize photographic quality, exploration of the photographer's environment and personal expression. A suitable adjustable camera is recommended.

17cd INTERMEDIATE PHOTOGRAPHY (3 units)

17c—17d (1.5—1.5) equivalent to 17cd.
Six hours lecture and studio.
Prerequisite: ART 17ab or equivalent.
The student will understand more advanced concepts and techniques of photography. The student will complete assignments that will emphasize the refinement of technique and personal expression. A suitable adjustable camera is required.

17ef COLOR PHOTOGRAPHY (3 units)

17e—17f (1.5—1.5) equivalent to 17ef.
Six hours lecture and studio.
Prerequisite: ART 17ab.
Problems in color processing, color reversal and color negative. Color printing from color negatives. Class discussion of work. Color balancing calculations. Problems in black and white photography. Student may pursue any line of specialized photography with approval of instructor. A suitable camera of reasonable quality is required.

17gh ADVANCED PHOTOGRAPHY (3 units)

17g—17h (1.5—1.5) equivalent to 17gh.
Six hours lecture and studio.
Prerequisite: ART 17cd or 17ef.
Designed to give the student an opportunity to pursue photography in an area of specialized interest. Advanced work is done in camera technique, dark room practices, lighting and color. The student emphasizes work in an area of personal interest. The class will involve itself in a joint photography project of its choosing. Technically proficient work of a creative and original nature is expected. A suitable camera is required.

17ij PHOTOGRAPHIC PROBLEMS (3 units)

17i—17j (1.5—1.5) equivalent to 17ij.
Six hours lecture and studio.
Prerequisite: Some experience in photography.
A suitable adjustable camera is required and a light meter is recommended. An advanced course designed to strengthen the student's technical skills and involve him in various visual photographic problems directed toward creativity and nonverbal communication.

18ab INDIVIDUAL PROJECTS IN PHOTOGRAPHY (2 units)

18a—18b (1—1) equivalent to 18ab.
One hour lecture and three hours studio.
Prerequisite: Evaluation by instructor.
Selected students are given special instruction in preparation for professional experience. Strengthening of graphic visualization and technical competence through challenging individual assignments. The content is not structured in the manner of beginning and advanced photography courses.

20ab PORTA PAC AND EDITING (3 units)

Six hours lecture/laboratory and field trips by arrangement.
Prerequisite: None.
Designed to educate students in the proper handling and operation of the portable color video camera, recorder and editing equipment. Aesthetics in visual composition, lighting, sound and editing as well as the psychological effects that can be created within each of these areas will be stressed. Students will become familiar with in-field videotaping techniques for use in news gathering, documentary work and other out-of-studio purposes. Students will produce a complete production as well as crew for each of the other student productions. Not open to students with credit in BRDCS 20ab.

25ab ART GALLERY MANAGEMENT AND ART PORTFOLIO DEVELOPMENT (3 units)

25a—25b (1.5—1.5) equivalent to 25ab.
Six hours lecture and studio.
Prerequisite: None.
Course is for the art student and students of other multi-disciplinary areas that need knowledge and experience in the preparation of their work for exhibiting and marketing. Topics discussed in the course will include: the art gallery, its function and operations, and preparation of work for exhibiting. Involvement in the activities of a working gallery will be part of the course.

29 SPECIAL STUDIES IN ART (0.5—3 units. Limit 9 units.)

One and a half to nine hours per week lecture/studio.
Prerequisite: Completion of beginning courses concurrently offered in medium.
Allows students, with permission of instructor and completion of beginning level courses in an Art area, to engage in selected advanced projects. Class content and unit credit to be determined by instructor and student. May be taken four times only.

30a ANCIENT MEDITERRANEAN ART (3 units)

Three hours lecture.
Prerequisite: None.
A survey of the art of the Mediterranean area from the Old Stone Age, through the ancient near Eastern, Egyptian, Agean, Greek, Etruscan, Roman, Early Christian and Byzantine periods, to the Moorish Occupations in Spain.
• 30b MEDIEVAL TO RENAISSANCE ART (3 units)

Three hours lecture.
Prerequisite: None.

A survey of the Art of Europe from the time of the Barbaric migrations after the fall of Rome, through the development of Romanesque and Gothic styles, to and including the Italian and Northern Renaissance.

• 30c BAROQUE TO MODERN ART (3 units)

Three hours lecture.
Prerequisite: None.


• 32a ART OF LATIN AMERICA (3 units)

Three hours lecture.
Prerequisite: None.

A survey of the arts, architecture, and artifacts produced in Latin America. Geographically it covers the regions of Mexico and Central and South America with emphasis on Mexico and the Central Andes. Studies will embrace pre-Columbian to modern times, with emphasis on pre-Columbian Indian empires. Not open to students with credit in CH ST 32b.

• 32b MEXICAN AND CHICANO ART (3 units)

Three hours lecture and discussion.
Prerequisite: None.

Deals with art history from 1521 to the present in Mexico and the United States. Emphasizes modern Mexican and Chicano artists who have worked in the 20th century. Explores panorama of relationships between art, history, religion, philosophy and respective art movements. Develops historical and cultural awareness in the students. The contributions to our society by the people of Mexican and Chicano heritage in both the United States and Mexico. Contemporary Chicano art styles will also be explored. Not open to students with credit in CH ST 32b.

• 33ab ART OF ECUADOR AND PERU (3 units)

Three hours lecture.
Prerequisite: None.

33a ART OF ECUADOR (1.5). Three hours per week for nine weeks.
33b ART OF PERU (1.5). Three hours per week for nine weeks.
33a—33b (1.5—1.5) equivalent to 33ab.
Prerequisite: None.

ART 33a studies Indian and European influences on the art of Ecuador. Emphasis on architecture, sculpture and painting as well as on art personalities such as Santiago, Caspice and Cantuna. ART 33b covers art of Peru and includes part of Bolivia located in the Lake Titicaca area. Archaeological sites studied will include Machu Picchu and the Nazca Lines. Emphasizes art from Pre-Columbian to modern periods.

• 34 ART OF SPAIN (1.5 units)

Three hours lecture for nine weeks.
Prerequisite: None.

A basic course on the Art of Spain will include art and architecture from the earliest Iberians to present day Spain.

• 35 AFRICAN AND AFRO-AMERICAN ART (3 units)

Three hours lecture/discussion.
Prerequisite: None.

A survey of the black tradition in artifacts, sculpture and painting from prehistoric times in Africa to the twentieth century in Africa and America. Begins with early cave paintings and covers the arts of families, tribes and peoples through the colonization period and ends with a survey of contemporary Africans and Afro-Americans.

• 36ab WOMEN ARTISTS (3 units)

36a—36b (1.5—1.5) equivalent to 36ab.
Three hours lecture.
Prerequisite: None.

The student will gain an understanding of art history and art appreciation through the study of women artists, as related to the psychology, philosophy and politics of the times. The student will gain an understanding of the contemporary woman artist through a biographical approach. Not open to students with credit in WN ST 36ab.

• 40 INTRODUCTION TO ART (3 units)

Three hours lecture.
Prerequisite: None.

An examination of architecture and the figurative arts as an expression of the culture that produced them.

71a—71b—71c—71d INTRODUCTION TO OIL PAINTING (1.5—1.5—1.5—1.5 units)

One hour lecture and two hours studio.
Prerequisite: None for 71a.

An introduction to the techniques and materials used for oil painting. The objective use of oils to meet the requirements demanded by composition and subject selected. To explore the elasticity and blending qualities of oil colors and their compatibility with various media.

ASTRONOMY
See Physical Science

AUTO
See Industrial Education

BACTERIOLOGY
See Life Science
ANTHROPOLOGY

The objectives of this program are to provide opportunity for the student to earn an Associate in Arts Degree in Anthropology and to prepare the student for upper-division study in a four-year college or university. Anthropology is a study of human cultures. Most graduates with a degree in Anthropology are likely to pursue careers in teaching, government service, research, law, or business.

PSYCHOLOGY

The major in psychology provides a study of the behavior of individuals and groups. The four-year graduate in this major is prepared for positions in research and teaching, counseling, and working in clinical settings.

SOCIOLOGY

Sociologists study the groups, institutions, and societies which are formed by human beings. The sociology major is intended to provide undergraduate preparation leading to careers in law, social work, urban and environmental planning, public service, counseling, mental health, and other similar professions.

COURSE DESCRIPTIONS

ANTHROPOLOGY

• 1 PHYSICAL ANTHROPOLOGY (3 units)
Three hours lecture.
Prerequisite: None.
The biological evolution of man and the non-human primates with emphasis on the human fossil record. Races of modern man and human population genetics.

• 2 CULTURAL ANTHROPOLOGY (3 units)
Three hours lecture.
Prerequisite: None.
A study of pre-literate societies which will provide a basis for better understanding of our more complex Western civilization. Content includes the nature of culture; comparison of several primitive cultures as to subsistence patterns, social organization, religion, language, the arts and personality development; investigation of the processes of culture change. How this information may be used in contacts with underdeveloped peoples of the world today.

• 3 ARCHAEOLOGY (3 units)
Three hours lecture plus field trips to archaeological and Indian sites by arrangement.
Prerequisite: None.
A survey of the basic methods and techniques of archaeology. Emphasis is on American and Kern County archaeology with lecture topics including Europe, the Middle East. Experiments in reproducing Indian technology and crafts.

• 5a AFRICAN ANTHROPOLOGY (3 units)
Three hours lecture/discussion.
Prerequisite: None.
The descriptive study of representative cultures of Sub-Saharan Africa. Analysis and systematic description of social structure including community, kinship and family, social institutions and organization, industries and arts in view of environment, historical development and functional interrelation. Includes methods of ethnographic research and evaluation as represented by readings in text.

• 5b PEOPLES OF MEXICO (3 units)
Three hours lecture.
Prerequisite: None.
A survey course of the representative Pre-Columbian cultures of Meso-America. Analysis and systematic description of the archaeological, ethnological and ethnographical theories of the development of Pre-Columbian peoples. Emphasis on an examination of the cultures of the Olmec, Maya, Toltec and Aztec periods of Meso-American pre-history. Not open to students with credit in CHST 5b.

• 5c NORTH AMERICAN INDIANS (3 units)
Three hours lecture/discussion.
Prerequisite: None.
A descriptive study of Indian culture and societies in North America. Discussion of proto-historic, historic and modern culture groups. Designed to provide an understanding and appreciation of the Indians of North America.

• 6 ARCHAEOLOGY FIELD STUDY (3 units. Limit 6 units.)
One hour lecture and six hours laboratory. Weekend field trips.
Prerequisite: ANTH 3 (may be taken concurrently).
Site excavation and analysis of materials in both field and laboratory situations. Designed to provide students with actual application of archaeological techniques.

• 7 MAGIC, WITCHCRAFT AND RELIGION (3 units)
Three hours lecture.
Prerequisite: None.
Multi-cultural introduction into the concepts and uses of magic, witchcraft and the supernatural as a part of the religious belief systems of cultures around the world. Comparisons will be made between the rituals and practices of Western and non-Western cultures.
• 35a KERN COUNTY ARCHAEOLOGY (1 unit)
Eighteen hours of lecture per semester.
Prerequisite: None.
An overview of the prehistory of Kern County. Students will learn about the different types of archaeological sites located in the region, how archaeological investigations are conducted and about the Native Americans that inhabited Kern County. Demonstrations of Indian technology will be presented. A field trip to archaeological sites is required and will expose students to the important archaeological sites in Kern County.

74 TOPICS IN ANTHROPOLOGY (0.5—2 units. Limit of 8 units.)
Minimum of eight hours per 0.5 unit.
Prerequisite: None.
Selected topics in anthropology coincident with speakers, current developments in anthropology and field excursions related to existing department offerings. May be taken four times only.

PSYCHOLOGY (PSYCH)

• 1a GENERAL PSYCHOLOGY (3 units)
Three hours lecture.
Prerequisite: A qualifying score on a college aptitude test or a grade of “C” or higher in PSYCH 51.
An introduction to the scientific study of behavior. Deals with perceptions, thinking, motivation, emotion, intelligence and learning; designed to contribute significantly to the general education of all students as well as to provide a basis for further study in the field of psychology. Major emphasis is placed upon general psychological principles.

• 1b PHYSIOLOGICAL PSYCHOLOGY (3 units)
Three hours lecture.
Prerequisite: PSYCH 1a.
A study of the physiological basis of behavior. Structure and function of the nervous system, specialized sense organs and responding structures. Study of methods of investigation, particularly experimental. For psychology majors and others planning for upper division work in psychology.

• 5 ELEMENTARY STATISTICS FOR THE BEHAVIORAL SCIENCES (3 units)
Three hours lecture.
Prerequisite: Two years of high school algebra or equivalent.
A study of statistics as applied to the behavioral sciences. Emphasis upon research design, the organization of data, measures of central tendency and variability, the normal curve, correlation and regression, hypothesis testing, parametric and non-parametric techniques, and one-way and two-way analysis of variance.

• 10 GENERAL PSYCHOLOGY FOR THE HEALTH SCIENCES (3 units)
Three hours lecture.
Prerequisite: Concurrent enrollment in a health science program.
An introduction to the scientific study of behavior. Deals with principles of development, perception, thinking, motivation; emotion, intelligence, learning and personal adjustment. Major emphasis is placed on general psychological principles and their relationship to the health sciences.

• 20 SOCIAL PSYCHOLOGY (3 units)
Three hours lecture.
Prerequisite: SOC 1 or PSYCH 1a.
Introduction of the individual into group life, the organization and perspectives of personality, the social control of conduct. Special attention to the social basis of personality development, socialization, communication processes, deviance, conformity and social control. Not open to students with credit in SOC 20.

• 21a—21b—21c—21d SPECIAL PROJECTS
(1—1—1—1 unit. Limit of 4 units.)
Three hours laboratory weekly by arrangement.
Prerequisites: Completion of PSYCH 1a with a grade of “B” or better and completion of the course in which they will be assisting with a grade of “B” or better.
Psychological Assistant and tutor. Assistants work primarily in a tutorial relationship with other students in a course which they previously completed at a high level of mastery. Designed for prospective psychology majors to give them pre-professional experience in teaching psychology. Assistants will be utilized in courses utilizing behavior modification techniques requiring low assistant/student ratios for effective instruction.

• 22 TECHNIQUES OF TUTORING THE EDUCATIONALLY HANDICAPPED
(3 units)
Three hours lecture and one hour laboratory.
Prerequisite: Evaluation by instructor.
A practical course in the mechanics of tutoring the educationally handicapped and an overview of symptoms. Course will stress competence in the use of audio-visual and specific equipment as well as materials used to help the educationally handicapped student. Will give students an understanding of the personal relationships that must be established between tutor and tutee.

• 25 STATES OF CONSCIOUSNESS (3 units)
Three hours lecture.
Prerequisite: PSYCH 1a.
An introduction to the comparative states of consciousness including focused awareness, sleep, dreaming, hypnosis, meditation, sensory deprivation, and drugs. Emphasis will include both physiological and psychological characteristics of states of awareness.
• 28 PSYCHOLOGY OF ETHNIC IDENTITY (3 units)

Three hours lecture.
Prerequisite: None.
Theoretical approach to the study of the psychological, cultural and biological factors relating to ethnic differences in contemporary society. Investigation of racial and social class differences in economic opportunity, social mobility, attitude formation and attitude changes. Also includes an examination of the sources of prejudice, intergroup relations and the minority reaction to dominance.

• 30 HUMAN SEXUALITY (3 units)

Three hours lecture.
Prerequisite: None.
The student will obtain a basic knowledge of the human sexual system, the sexual act, today's sexual attitudes and behavior, sexual diseases and disorders, reproduction and birth control, sexual variance, sexual inadequacies and their treatment, and the legal and ethical aspects of sexuality.

• 31 MARRIAGE (3 units)

Three hours lecture and one-hour lecture/discussion.
Prerequisite: None.
A functional approach to the problems of marriage; the nature and purpose of family life; special emphasis on the problems of modern courtship, mate selection and the adjustment problems associated with the early years of marriage. Not open to students with credit in FAM S 31.

• 32 MARRIAGE AND FAMILY RELATIONSHIPS (3 units)

Three hours lecture.
Prerequisite: None.
Intended primarily for those who are or have been married. Preliminary consideration is given to the factors involved in wise mate selection, but the major focus is on the exposition of the common difficulties associated with marriage and family life. Techniques for resolving such difficulties are explored.

• 33 PERSONAL AND SOCIAL ADJUSTMENT (3 units)

Three hours lecture.
Prerequisite: PSYCH 1a or a grade of “B” in PSYCH 51.
Dynamics of normal and abnormal personality development. The study of frustration, threat and conflict, and the reactions to stress through defense mechanisms and coping behavior. Consideration is given to the basic methods of psychotherapy and behavior therapy.

• 34 THE UNMARRIED ADULT: DIVORCED, WIDOWED AND SINGLE BY CHOICE (3 units)

Three hours lecture.
Prerequisite: None.
The student will develop an understanding of the unmarried adult's life based on a balance of resources, communication patterns, and problem solving skills in adjustment as they relate to everyday life. The student will better understand his/her own goals, values, and motives as they relate to relationships. Not open to students with credit in WN ST 34.

• 35 INTRODUCTION TO PARAPSYCHOLOGY (3 units)

Three hours lecture/discussion/experimentation.
Prerequisite: None. PSYCH 1a is recommended.
The student will critically examine the basic principles of extra-sensory perception and parapsychological phenomena including telepathy, clairvoyance, precognition, retrocognition, and psychokinesis. Emphasis will be on historical development, laboratory investigations, and theoretical explanations of the nature of parapsychic phenomena.

• 37 PSYCHOLOGY OF SEX DIFFERENCES (3 units)

Three hours lecture/discussion.
Prerequisite: None. PSYCH 51 or PSYCH 1a recommended.
The student will know and understand the images of men and women in history and mythology, sex differences in theories of development, stages of adjustment, abilities, achievement, and motivation, biological influences on behavior, sexuality, minority group sex roles, and cross-cultural perspectives on sex roles. Included will be emphasis on application of the aforementioned theoretical knowledge to the life of the student.

• 40 CHILD PSYCHOLOGY AND DEVELOPMENT (3 units)

Three hours lecture.
Prerequisite: PSYCH 1a or equivalent.
The study of the growth and development of children. Emphasizes intellectual and personality development as well as the handling of behavior problems through guidance and discipline.

• 41 ADOLESCENT PSYCHOLOGY (3 units)

Three hours lecture.
Prerequisite: PSYCH 1a.
The physical, intellectual, emotional, and social development during adolescence.
• 42 PSYCHOLOGY OF EXCEPTIONAL CHILDREN (3 units)
Three hours lecture/discussion.
Prerequisite: PSYCH 1a or 51.
A survey of the etiology of the exceptional child, including social, legal and educational implications. Designed to acquaint the student with the life-style of the handicapped in our society. Major emphasis is on mental retardation with some attention to other handicapping conditions.

• 45 BEHAVIOR MODIFICATION (3 units)
Three hours lecture.
Prerequisite: PSYCH 1a.
Introduction to the basic principles of learning theory and their application to behavioral change.

51 PSYCHOLOGY FOR LIFE (3 units)
Three hours lecture.
Prerequisite: None.
A non-theoretical approach to the study of human behavior, designed to aid the student to improve his adaptation to the problems of college, vocation, family and society.

52 CHILD PSYCHOLOGY FOR TEACHER AIDES (3 units)
Three hours lecture.
Prerequisite: None.
The study of growth and development. Emphasis is given to the handling of behavior problems through guidance and discipline and to the special problems of dealing with disadvantaged children in the classroom.

53a CHILD PSYCHOLOGY AND DEVELOPMENT (3 units)
Three hours lecture.
Prerequisite: None.
The study of growth and development of children from infancy to adolescence. Emphasizes the stages of development problems of growing up and the handling of behavior problems through understanding, discipline and guidance.

53b ADOLESCENT PSYCHOLOGY AND DEVELOPMENT (3 units)
Three hours lecture.
Prerequisite: None.
A study of the growing person who is making the transition from childhood to adulthood. Emphasizes learning to guide the adolescent through better understanding him/her.

55 TEACHER AIDE TRAINING (2 units)
Two hours lecture.
Prerequisite: None.
Opportunity to explore the various duties of the teacher aide. Study of the factors influencing learning. Emphasizes the role of the aide in assisting the professional educator.

57 UNDERSTANDING SELF AND OTHERS (3 units)
Three hours lecture.
Prerequisite: None.
Introduction to human interaction. A group course which utilizes discussion and group experiences to increase understanding of oneself and others.

71 TEACHING MINORITY STUDENTS (3 units)
Three hours lecture.
Prerequisite: Designed for teachers and counselors or for those preparing for a career in teaching or counseling.
A study of the problems which minority students encounter in their school experience and exploration of possible ways the teacher and counselor can help them succeed in school.

72a—72b—72c CURRENT INNOVATIONS IN TEACHING (1—1—1 unit)
Eighteen hours lecture for each unit.
Prerequisite: Recommended for those involved in teaching.
A lecture, discussion and hands-on series on innovation drawing from many different disciplines. Programs are selected to encourage application to a variety of instructional fields. When appropriate, on-campus or community experts will be used to discuss the presentations. Hard and software demonstrations will be integrated into the presentations whenever possible.

74 TOPICS ON APPLIED PSYCHOLOGY (0.5—1 unit. Limit of 4 units.)
Eight hours per one-half unit.
Prerequisite: Evaluation by instructor.
Selected topics in applied psychology, emphasizing development and use of specific methods, designed to cope with particular problems usually in an institutional or group setting. May be taken four times only.
SOCIOLOGY
(SOC)

1 INTRODUCTION TO SOCIOLOGY (3 units)
Three hours lecture.
Prerequisite: None.
The principal concepts and theories of sociology; culture, personality, status, primary and secondary groups, community, social institutions, etc. For the student who desires a greater understanding of the complexities and conflicts of modern industrialized society. Recommended especially for majors in criminology, social welfare, teaching and anyone planning to do advanced work in the social sciences.

2 PROBLEMS OF MODERN SOCIETY (3 units)
Three hours lecture.
Prerequisite: SOC 1.
a study of the social problems of modern society from a sociological point of view. Emphasizes the major social changes taking place and the increasing pace of social change as a major causative factor in social problems. Attempts to arrive at accurate methods of identification and measurement of social problems and to establish criteria for judging the probable results of proposed changes. Includes studies of unemployment, race and ethnic relations, family disorganization, poverty, etc.

3a INTRODUCTION TO SOCIAL SERVICE (3 units)
Three hours per week.
Prerequisite: SOC 1.
Introduces the student to the fields of social welfare services and to the social work profession. Historical development, analysis of structure, policies and issues; emergence of social work profession; contemporary practices and policies of social welfare agencies. Principles and techniques of social work, such as interviewing, record keeping, report writing and determining eligibility for services. The work of representative social agencies in the community.

3b ADVANCED SOCIAL SERVICE (3 units)
Three hours lecture.
Prerequisite: SOC 3a.
Builds on knowledge and skills acquired in previous courses. Continued practice in social work techniques plus analyses of typical case histories. Theories, concepts and values used by social workers serving individuals, families and groups in public assistance, correctional, child welfare, psychiatric family service, medical, youth services and other agencies. Diagnostic and treatment methods used in helping professions. The welfare subculture will be explored and the interaction between the social worker and other professionals will be evaluated.

5 COMMUNITY SERVICE (1–2 units per semester. Limit 8 units.)
One hour seminar and two to five hours field work per week.
Prerequisite: None.
Supervised field work related to seminar instruction. Field work opportunities include tutoring, politics, work with the mentally ill, the aged, delinquents and adult prisoners. May be taken four times only.

7 JUVENILE DELINQUENCY (3 units)
Three hours lecture.
Prerequisite: SOC 1 or PSYCH 1a.
A course for students, parents, social workers and teachers pertaining to problems of the maladjusted juvenile, ranging in type from the potential delinquent to the institutionalized offender. Not open to students with credit in COR A 7.

10 TOPICS IN SOCIOLOGY (0.5–2 units. Limit 8 units.)
Three hours lecture for three to eleven weeks.
Prerequisite: SOC 1 or 50.
Selected topics in sociology which coincide with current student interests, recent developments within the field, special speakers or events connected with Community Services, Women's Study Center, Chicano Studies Program, Black Studies Program, field excursions related to existing department offerings or any other specifically designated area of study approved by the college and its Curriculum Committee. May be taken four times only.

20 SOCIAL PSYCHOLOGY (3 units)
Three hours lecture.
Prerequisite: SOC 1 or PSYCH 1a.
The introduction of the individual into group life, the organization and perspectives of personality, the social control of conduct. Special attention to the social basis of personality development, socialization, communication, processes, deviance, conformity and social control. (Not open to students with credit in PSYCH 20.)

21 RACE AND POVERTY IN AMERICAN LIFE (3 units)
Three hours lecture.
Prerequisite: None.
An examination of race and poverty with special emphasis on the need for improved communication between the representatives of society, such as teachers, social workers and policemen and the poor. The attitudes of professionals in these fields will be examined. Attempts to sensitize students toward seeking solutions to these problems. Although the course is concerned with urban and rural poverty generally, it will also examine local poverty in considerable detail. When appropriate, outside experts will lecture on their specialties.
• 36 SOCIOLOGY OF THE CHICANO (3 units)

Three hours lecture/discussion. 
Prerequisite: None. 
A survey course covering the socioeconomic characteristics of the Chicano community. The emerging cultural forces of the Chicano population are studied with an analysis of their educational status, immigration issues, barrio culture, politics, women, and socioeconomic features. A study of the inter-relationships of Chicano Cultural groups in labor, politics, and the barrio. Studies the developments of assimilation, minority status, Chicanismo, and cultural suppression as they relate to the Chicano experience. Not open to students with credit in CH ST 36. 

• 36L FIELD WORK IN CHICANO SOCIOLOGY (2 units)

Two hours lecture/seminar and four hours fieldwork. 
Prerequisite: None. 
Provides students with field work experience in the Chicano community in a variety of settings such as tutoring, bilingual aides, high school liaison committees, and/or research projects. Students are allowed to design their own field work projects that relate to their respective interests, career goals, or community involvement. Conducted on the basis of "observing" the Chicano community in which field trips will be arranged and coordinated throughout the semester, also with weekly seminars. Not open to students with credit in CH ST 36L. 

50 APPLIED SOCIOLOGY (3 units)

Three hours lecture/discussion. 
Prerequisite: None. 
The study of sociological concepts, the need for greater knowledge of society, the value conflicts within society, and the consequences of social change. How social change and social problems relate to the life of the individual. 

51 GROUP DYNAMIC SKILLS (3 units)

Three hours lecture/discussion. 
Prerequisite: SOC 1 or 3a. 
The study of communication techniques. Development of skills in counseling, interviewing, oral and written reporting and group discussion. (Formerly CMN S 51.) 

52 PRINCIPLES OF COMMUNITY AGENCY ORGANIZATION AND MANAGEMENT (3 units)

Three hours lecture/discussion and participation. 
Prerequisite: SOC 1 or 3a. 
Plans for constructive development of community groups. The response of the neighborhood to community workers. Role models for community workers. Role application to communities. The dynamics of planned change. (Formerly CMN S 52.)
BUSINESS EDUCATION

Accounting
Banking
Business Administration
Insurance
Management
Marketing
Office Skills
Real Estate
Secretarial Training

CERTIFICATES OF ACHIEVEMENT

These training programs are designed for those who prefer career specialization courses and the earliest possible opportunity for job placement and/or the establishment of a self-operated small business. Students wishing greater in-depth preparation may continue toward more advanced courses, an associate degree or transfer to a four-year institution.

ACCOUNTING CLERK CERTIFICATE

Upon completion of the following courses with at least a "C" grade in each course, a student will be awarded an Accounting Clerk Certificate.

Required Courses

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<tr>
<th>Course Code</th>
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<tbody>
<tr>
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<td>ACCTG253a</td>
<td>Intro Accounting 1</td>
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<td>BUS A 1a</td>
<td>Prin of Accounting</td>
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<td>ACCTG253b</td>
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<td>BUS 53</td>
<td>Math/Eltrnc Calc</td>
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<tr>
<td>BUS 253</td>
<td>Math/Eltrnc Calc</td>
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<td>SEC T 56</td>
<td>Office Procedures</td>
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Required Courses

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<tr>
<td>BUS 58</td>
<td>Human Relat/Motivat 3.0</td>
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<td>DTA P 1</td>
<td>Intro Data Process</td>
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<td>COM S 5</td>
<td>Basic Progrmng Lang 3.0</td>
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<tr>
<td>SEC T 52</td>
<td>Business English</td>
<td>3.0</td>
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CALIFORNIA REAL ESTATE CERTIFICATE

Approved by and operated in cooperation with the California Department of Real Estate and the California Real Estate Association.

Required Courses

(Should be taken in listed order)

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<tr>
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<tr>
<td>R EST 60</td>
<td>Legal Aspects RI Est</td>
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<tr>
<td>R EST 64</td>
<td>Real Est Practice</td>
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Clerical Certificate

Upon completion of the following courses with at least a "C" grade in each course, a student will be awarded a Clerical Certificate of Completion.

Required Courses

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<th>Course Code</th>
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<td>SEC T 60a</td>
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<td>BUS 65</td>
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<tr>
<td>BUS 14</td>
<td>Bus/Soci Responsib 3.0</td>
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GENERAL OFFICE CERTIFICATE

Provides training in the various skills needed for such jobs as receptionist, typist, office clerks, and secretaries who do not need shorthand skills. Designed for the student with or without a high school background in office training.

Required Courses

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<th>Course Code</th>
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<td>BUS 54</td>
<td>Payroll Accounting</td>
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<td>SEC T 56</td>
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<tr>
<td>ACCTG 53a</td>
<td>Intro Accounting 1</td>
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</tbody>
</table>

Other Suggested Courses

DTA P 1 Intro Data Process (3); SEC T 62 Sec Word Processing (3), SEC T 63 Wrd Proc Offc Simul (3); PHIL 14 Bus/Soci Responsib (3).
**LEGAL SECRETARIAL CERTIFICATE**

Upon completion of the following courses with at least a “C” grade in each course, a student will be awarded a Legal Secretarial Certificate of Achievement.

### Required Courses

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<td>SEC T 67</td>
<td>Adv Legal Off Proced</td>
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<td>OFF S 65</td>
<td>Machine Transcript</td>
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<tr>
<td>BUS 55</td>
<td>Survey of Bus Law</td>
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<td>BUS 18a</td>
<td>Business Law</td>
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<td>SEC T 62</td>
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<tr>
<td>SEC T 63</td>
<td>Wrd Proc Off Simul</td>
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**MANAGEMENT CERTIFICATE**

Designed for those already in management who need additional training.

### Required Courses

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<th>Course Name</th>
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<td>MGMT 64</td>
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<td>MGMT 67</td>
<td>Fund Fiscal Admin</td>
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<td>MGMT 69</td>
<td>Suprv/Human Relat</td>
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<td>BUS 58</td>
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<tr>
<td>MGMT 63</td>
<td>Written Communicatin</td>
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### Other Suggested Courses


**SECRETARIAL CERTIFICATE**

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### WORD PROCESSING CERTIFICATE

Upon completion of the following courses with at least a “C” grade in each course, a student will be awarded a Word Processing Certificate of Achievement.

### Required Courses

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<th>Course Name</th>
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<td>Secret Wrd Processing</td>
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<td>Wrd Proc Off Simul</td>
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<td>MGMT 65</td>
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<td>MGMT 66</td>
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<td>MGMT 68</td>
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<td>BUS 58</td>
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<td>MGMT 60a</td>
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<tr>
<td>MGMT 60b</td>
<td>Supervis Trg</td>
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### Other Suggested Courses


**ASSOCIATE DEGREE PROGRAMS**

Students are encouraged to continue their training and education beyond the Certificate of Achievement by taking additional technical-related courses and general education courses which may lead to an Associate of Science or Associate of Arts Degree.

Students must comply with the requirements as shown in the catalog under Graduation Requirements. Counselors/advisors will assist the student in planning for an associate degree.
### ACCOUNTING

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
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<tbody>
<tr>
<td>ACCTG 53a Intro to Accounting</td>
<td>3.0</td>
<td>BUS 55 Survey of Bus Law</td>
<td>3.0</td>
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<td>OR</td>
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<tr>
<td>ACCTG253a Intro to Accounting</td>
<td>3.0</td>
<td>BUS A 18a Business Law</td>
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<tr>
<td>BUS 53 B Math/Electnc Calc</td>
<td>4.0</td>
<td>PHIL 54 Personal Finance</td>
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<td>OR</td>
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<tr>
<td>BUS 253 B Math/Electnc Calc</td>
<td>4.0</td>
<td>BUS 58 Human Relat/Motivat</td>
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<tr>
<td>DTAP 1 Intro Data Process</td>
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<td>ACCTG254 Payroll Accounting</td>
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<tr>
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<td>BUS 58 Human Relat/Motivat</td>
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**Mid-management**

Designed to prepare the student to manage his/her own business, to enter mid-management in a business firm, or to join a governmental agency.

**Required Courses**

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<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>MGMT 69 Superv/Human Relat</td>
<td>3.0</td>
<td>MGMT 60b Supervis Trng</td>
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<tr>
<td>BUS A 18a Business Law</td>
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<td>MGMT 60a Intr Suprvis Trng</td>
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<tr>
<td>MGMT 63 Written Communicat</td>
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<td>DTAP P 1 Intro Data Process</td>
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<tr>
<td>MGMT 65 Personnel Managemnt</td>
<td>3.0</td>
<td>PHIL 53ab Work Ethics</td>
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<tr>
<td>REST 62 Real Estate Finance</td>
<td>3.0</td>
<td>MGMT 70b Legal Aspcts Rl Est</td>
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<tr>
<td>MKTG 64 Fund of Advertising</td>
<td>3.0</td>
<td>MGMT 70 Series — Management Topics.</td>
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</tr>
</tbody>
</table>

**Business Administration**

The general purpose of the program in Business Administration at the university and state college is twofold. First, they are organized to help students to develop a broad understanding of our economy and our society in order to serve as a basis for responsible administrative and executive positions in business and government. Second, they offer the opportunity for students to acquire skills in specialized and professional types of employment.

**Banking and Finance**

Designed for the student preparing to enter banking and finance service or those in a management training position in these two fields.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
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<td>ACCTG Approved Course</td>
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<tr>
<td>BNKG 70a Prin Banking Operation</td>
<td>3.0</td>
<td>BNKG 77c Installment Credit</td>
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<tr>
<td>DTAP P 1 Intr Data Process</td>
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<td>BUS 58 Human Relat/Motivat</td>
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<tr>
<td>BNKG 76 Money and Banking</td>
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<td>PHIL 53ab Work Ethics</td>
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<tr>
<td>BNKG 75 Analyz Finan Statem</td>
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<td>OR</td>
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<tr>
<td>MGMT 66 Prin Organiz/Mngmt</td>
<td>3.0</td>
<td>PHIL 14 Bus/Socl Responsib</td>
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</tbody>
</table>

**Business Administration Major**

Since requirements vary, the current catalog of the chosen college or university should be consulted for specific requirements of the school of Business Administration.

This suggested program will meet most of the lower division requirements at the California State colleges and universities as well as fulfilling all the requirements for the Associate of Arts Degree from Bakersfield College.
Other Suggested Courses
OFF S 50a Beginning Typing (3); BUS 54 Personal Finance (3); BUS 55 Survey of Bus Law (3); R EST 65 Inc Tax Ri Est Inv (3); MGMT 59 Personnel Management (3); MGMT 63 Written Communication (3); BNKG 77c Installment Credit (3); BUS A 1b Prin of Accounting (3).

SECRETARY/STENOGRAPHER
Designed for the student who is beginning or continuing stenographic training. In addition to mastery of skills, successful secretaries and stenographers must possess a high sense of responsibility, good grooming and desirable personality traits.

Required Courses

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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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<tr>
<td>SEC T 52</td>
<td>Business English</td>
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</tr>
<tr>
<td>BUS 52</td>
<td>Business Wld Today</td>
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<td>BUS 53</td>
<td>B Math/Electnc Calc</td>
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<tr>
<td>OFF S 52</td>
<td>Filing</td>
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<tr>
<td>OFF S 60a</td>
<td>Adv Typing</td>
<td>3.0</td>
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<tr>
<td>SEC T 10</td>
<td>Business Correspon</td>
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<tr>
<td>OFF S 65</td>
<td>Machine Transcript</td>
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<tr>
<td>SEC T 57</td>
<td>Secretarial Acctng</td>
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</tr>
<tr>
<td>BUS 58</td>
<td>Human Relat/Motivat</td>
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</tr>
<tr>
<td>SEC T 56</td>
<td>Office Procedures</td>
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</tbody>
</table>

COURSE DESCRIPTIONS

ACCOUNTING (ACCTG)

53a INTRODUCTION TO ACCOUNTING 1 (3 units)

Three hours lecture.
Prerequisite: None, but it is strongly recommended that BUS 53 be taken prior to or concurrent with this course.
An introductory course in modern financial accounting theory and practice designed to serve the needs of students who plan to work in some phase of accounting. The student will become proficient in the analysis of financial transactions so that they can be recorded in the accounting records of a business in accordance with the rules of double-entry bookkeeping. The accounting cycle is covered to include adjusting entries, the expanded worksheet, and the preparation of financial statements. Not open to students with credit in ACCTG 253a.

53b INTRODUCTION TO ACCOUNTING 2 (3 units)

Three hours lecture.
Prerequisite: ACCTG 53a.
An intermediate course in modern accounting theory and practice giving particular emphasis to accounting questions and issues peculiar to the partnership as well as an introduction to corporation accounting. Special attention is given to accounting methods and procedures which include depreciation, worksheets and payroll. Not open to students with credit in ACCTG 253b.

54 PAYROLL ACCOUNTING (3 units)

Three hours lecture.
Prerequisite: ACCTG 53a or 253a.
Provides student a good foundation in payroll computations, payroll record keeping, and the filing of quarterly and annual payroll tax reports. Involves the study of California Disability Insurance, California Unemployment Insurance, Federal Unemployment Insurance, Federal Social Security, Federal Income Tax and California Income Tax and how these taxes affect the employee and employer. Not open to students with credit in ACCTG 254.

57a FUNDAMENTALS OF FEDERAL INCOME TAX PREPARATION FOR PRACTITIONERS AND PREPARERS (3 units)

Three hours lecture.
Prerequisite: Knowledge of income tax preparation desirable but not required. Emphasizes those areas of individual, partnership and corporation tax returns having the greatest number of discrepancies.

Acctg 60 ACCOUNTING ON THE MICROCOMPUTER

2 units, 2 hours lect/disc, prereq: AccTG 53a or equivalent
76 SCHOOL DISTRICT BUSINESS PROCEDURES (2 units)

Three hours lecture for twelve weeks.
Prerequisite: None.
An introductory course in school district business procedures. Designed to acquaint the general public with modern educational business functions, responsibilities and with legal guidelines relative to revenue expenditure procedures. Particularly serves the needs of persons new to school district business offices and offers a broad exposure for any existing school employee of the supportive functions of a school district operation.

253a INTRODUCTION TO ACCOUNTING 1 (3 units)

Three hours individualized, self-paced instruction and supervised lab work.
Prerequisite: None, but it is strongly recommended that BUS 253-Business Mathematics on electronic calculators be taken prior to or concurrent with this course.
An introductory course in modern financial accounting theory and practice designed to serve the needs of students who plan to work in some phase of accounting. The student will become proficient in the analysis of financial transactions so that they can be recorded in the accounting records of a business in accordance with the rules of double-entry bookkeeping. The accounting cycle is covered to include adjusting entries, the expanded worksheet, and the preparation of financial statements. Not open to students with credit in ACCTG 53a.

253b INTRODUCTION TO ACCOUNTING 2 (3 units)

Three hours individualized, self-paced instruction and supervised laboratory work.
Prerequisites: ACCTG 53a or 253a. It is also strongly recommended that BUS 253—Business Mathematics on Electronic Calculators be taken prior to or concurrent with this course.
The second part of an introductory course in modern financial theory and practice designed to serve the needs of students who plan to work in some phase of accounting. The student will become proficient in the analysis of financial transactions peculiar to the partnership and corporate forms of business ownership. Special attention is given to accounting methods and procedures which include the valuation of inventory, accounts receivable, notes payable, notes receivable and drafts, depreciation, depletion and amortization, capital stock transactions, bonds and other long term liabilities. Not open to students with credit in ACCTG 53b.

254 PAYROLL ACCOUNTING (3 units)

Three hours individualized, self-paced instruction and supervised class work.
Prerequisite: ACCTG 53a or 253a.
Provides student a good foundation in payroll computations, payroll record keeping, and the filing of quarterly and annual payroll tax reports. Involved the study of California Disability Insurance, California Unemployment Insurance, Federal Unemployment Insurance, Federal Social Security, Federal Income Tax and California Income Tax and how these taxes affect the employee and employer. Not open to students with credit in ACCTG 54.

263 TAXATION ACCOUNTING (3 units)

Three hours individualized, self-paced instruction and supervised laboratory.
Prerequisite: ACCTG 53a or 253a.
An introductory course in federal income taxation, dealing primarily with individual income taxes, but including taxation of partnerships and corporations. The student will learn the tax laws and then apply them by solving problems, including the completion of federal tax forms. Not open to students with credit in ACCTG 63.

70a PRINCIPLES OF BANK OPERATION (3 units)

Three hours lecture.
Prerequisite: None.
The development of banking in the United States, economic functions of banking, principles behind bank operations and the many facets of banking services to the public.

76 MONEY AND BANKING (3 units)

Three hours lecture.
Prerequisite: None.
Emphasizes the banking system as the circulating medium of our economy; the effect of bank operation on the economy; the nature and creation of money; the uses of money in modern society; and the influence of money on price levels and on general business activity. Discusses the Federal Reserve system, its obligations and powers, and Treasury policy as it affects monetary problems.

77a AGRICULTURAL FINANCE (3 units)

Three hours per week.
Prerequisite: None, but recommended for those in lending or farming enterprises.
Designed as a review of the role of credit in modern agriculture. Presents the methods employed in making, servicing and collecting farm loans. The extension of agricultural credit is approached from the standpoint of financing cattle, sheep, dairy, poultry and producers of grain; cotton; tobacco, potatoes, fruits and truck crops. Also considered are farm equipment, farm real estate loans, farming as a business, loan analysis and the public relations aspects of farm financing.

77b CREDIT ADMINISTRATION (3 units)

Three hours per week.
Prerequisite: None, but designed for those employed in credit or lending positions.
Provides assistance to students in preparing for the handling of bank loans and discounts. Considers the formulation and administration of a sound loan policy with emphasis on the factors to be reviewed in each bank when the loan policy and the method of carrying it out are being determined. Careful review is made of the means by which adequate information may be collected and analyzed and the degree of rise approximated.
77c INSTALLMENT CREDIT (3 units)

Three hours lecture.
Prerequisite: None.
Outlines policies, procedures and techniques of installment lending developed recently by commercial banks. Emphasizes credit, collection, new business, policy relations. Discusses automobile financing, the importance of installment credit to all income groups and its role in community life.

78 ANALYZING FINANCIAL STATEMENTS (3 units)

Three hours lecture.
Prerequisite: None.
An introduction to the practical analysis of financial statements to assist in the wise and profitable extension of credit. Primarily aimed toward students employed by financial institutions and grantees of credit.

79 FINANCING BUSINESS ENTERPRISE (3 units)

Three hours lecture.
Prerequisite: None, but recommended for those in the lending profession or those concerned with financing business enterprises.
Basic concepts related to long term and short term funds, fixed and circulating capital, the importance of solvency and the central role of earnings in business as they integrate with the banking function of lending. The basic problems in the allocation of risk, income and control in business finance are covered. The legal structures of sole proprietorships, partnerships and corporations are discussed as they relate to the financing of business enterprises.

BUSINESS

• 39 THE CONSUMER IN AMERICAN SOCIETY (3 units)

Three hours lecture.
Prerequisite: None.
Designed to enable the student to classify consumer choices of needs versus wants; order consumer decisions; identify sources and techniques; describe the steps involved in applying comparative shopping techniques to specific purchases.

51 BUSINESS MATHEMATICS (3 units)

Three hours lecture.
Prerequisite: Qualifying score on a basic math test.
The student will review basic arithmetic skills, increase his/her mastery of such skills and become proficient in their application to business problems and situations. The areas emphasized are bank records, invoices, cash and trade discounts, markup and markdown, inventory valuation, payroll, simple and compound interest, promissory notes, installment buying, stock and bonds, amortization, real estate loans, property tax, personal income tax, depreciation, and insurance. Not open to students with credit in BUS 53, 251 or 253.

52 TODAY'S BUSINESS WORLD (3 units)

Three hours lecture and discussion.
Prerequisite: None.
Explores the nature and scope of business, its component parts; how business is owned, organized and managed. Some areas covered are: our economic system, government regulation and taxation, the legal environment, business ethics, forms of business ownership, internal organization, management, labor relations, production, financing, marketing and decision making. Required of all career business students.

53 BUSINESS MATHEMATICS ON ELECTRONIC CALCULATORS (4 units)

Three hours lecture and two hours laboratory.
Prerequisite: Qualifying MATH score.
A business approach to the study of fractions, decimals and percentages with applications in printing and electronic calculators. Emphasizes depreciation, discounts, interest, installment buying, financial statements, credit, insurance and annuities. Not open to students with credit in BUS 51 or BUS 253.

• 54 PERSONAL FINANCE (3 units)

Three hours lecture.
Prerequisite: None.
A study of the basic, essential subject of personal finance. Designed for the student who is interested in the problem of allocating income and managing personal finances. Topics covered: maximization of income, budgeting and allocation of income, use of credit, saving and investing, housing, transportation, insurance, taxes, retirement income and estate planning. Emphasizes the application of the principles studied.

55 SURVEY OF BUSINESS LAW (3 units)

Three hours lecture.
Prerequisite: None.
A survey of the legal rights, duties and responsibilities common to all in the areas of contract, sales, torts and crimes. A review of the functions of our judicial institutions. For non-transfer students.

57a SPANISH FOR SECRETARIES AND RECEPTIONISTS (3 units)

Three hours lecture/drill.
Prerequisite: None.
The student will develop basic conversational skills necessary for general receptionist work and writing skills useful for writing letters and memos. Not open to students with credit in SPAN 57a.
58 HUMAN RELATIONS AND MOTIVATION (3 units)
Three hours lecture.
Prerequisite: None.
A behavioral approach to the business environment. Stresses self-improvement through self-understanding; elements of job applications and job advancement; motivation, people-to-people relationships and techniques of leadership on the job. Satisfies three units of elective social science credit.

71a LEADERSHIP AND MANAGEMENT TRAINING
(1—4 units. Limit 8 units.)
Eighteen hours of instruction per unit.
Prerequisite: None.
A basic course in leadership training with emphasis on student participation. Outlines what leadership is, problems in leadership, steps a person must take to become a leader, and, through practical class projects, provides practice in leadership training. May be taken four times only.

73 INTRODUCTION TO INVESTMENTS (3 units)
Three hours lecture.
Prerequisite: None.
An introduction to the principles of investments and money management.

74 ADMINISTRATIVE MANAGEMENT FOR SMALL BUSINESSES (3 units)
Three hours per lecture.
Prerequisite: None.
Designed to assist the small business owner or manager with overall determination of major policies and objectives of the business. Such policies as expansion, developing assistants, buying and selling, relationships of volume, costs, price, quality, service and timing, human relations, customer services and such other problems as the group interest directs will be considered.

80 TOPICS IN FINANCIAL INSTITUTIONS
(1—4 units. Limit 8 units.)
Eighteen hours of instruction per unit.
Prerequisite: None.
A series of workshop and/or seminar sessions devoted to the improvement of skills, attitudes and knowledge of financial institution personnel. The course may feature panels of specialists or individual speakers, who will be professionals in the financial institution business with expertise in a particular subject area. Topics may include management education, in-house training and development programs, as well as other special programs. May be taken four times only.

251 BUSINESS MATHEMATICS (3 units)
Self-paced minimum of three hours per week in the Business Math and Accounting Lab. Equivalent to BUS 51. Not open to students with credit in BUS 53 or 253.

253 BUSINESS MATHEMATICS ON ELECTRONIC CALCULATORS
(4 units)
Self-paced, minimum of five hours per week in the Business Math and Accounting Lab. Equivalent to BUS 53. Not open to students with credit in BUS 51 or 251.

263 ELECTRONIC MACHINE CALCULATION (2 units)
Minimum of five hours per week of individualized, self-paced instruction and supervised lab work is required. May be completed in nine or less weeks.
Prerequisite: None.
Designed to develop skill in the use of the ten-key touch, to teach the basic procedures for using the electronic calculator, and to apply these procedures to the solving of the more frequently encountered business problems. Not open to students with credit in BUS 53 or BUS 253.

264 TEN KEY PROFICIENCY (1 unit)
Five hours per week individualized, self-paced instruction and supervised laboratory for six weeks.
Prerequisite: None.
Designed to develop skill and proficiency in the use of the ten key calculator by touch and the application of such skill and proficiency in the solution of the more frequently encountered business problems and the processing of business forms and documents. Not open to students who have completed BUS 53, 253, or ACCTG 63, 263.

BUSINESS ADMINISTRATION
(BUS A)

• 1a—1b PRINCIPLES OF ACCOUNTING (3—3 units)
Four hours lecture.
Prerequisite: Sophomore standing. 1a prerequisite to 1b.
An introduction to accounting theory and practice. The first semester covers the recording, analyzing and summarizing procedures and concepts necessary to determine and interpret the financial position and income of a merchandising business. The second semester includes partnership and corporation accounting and the application of cost accounting, statement analysis and income taxes to the control and decision making processes of a business organization.

• 18a BUSINESS LAW (3 units)
Three hours lecture.
Prerequisite: None.
• **18b BUSINESS LAW (3 units)**

Three hours lecture.
Prerequisite: BUS A 18a.

• **20 THE AMERICAN BUSINESS ENTERPRISE (3 units)**

Three hours lecture.
Prerequisite: Qualifying score on a college aptitude test.
The nature, function and management of the business enterprise in our modern political, social and economic environment; business structure and organization; business decision-making processes; evaluation of the relationships of business to government, to labor and to the public.

**INSURANCE (INSUR)**

• **21 PRINCIPLES OF INSURANCE (3 units)**

Three hours lecture.
Prerequisite: None.
Develops an understanding of the basic principles of insurance as well as the nature and operation of the insurance business. Emphasizes the principles which underlie the entire field of insurance. Understandings are developed in the fundamentals of: indemnity, insurable interest, co-insurance, subrogation, proximate cause, negligence and contributory negligence, risk, requisites of insurable risks, deductibles, value policy and probability. One of the required subject areas for the I.I.A. program in general insurance. Equivalent to I.I.A. Course No. 21.

• **22 PROPERTY INSURANCE (3 units)**

Three hours lecture.
Prerequisite: INSUR 21 or counseling interview.
Designed to give students an understanding and appreciation of property and liability insurance principles. Property insurance focuses largely on insurance coverages as they are implemented through contracts for property risks. Selected topics for study include: the standard fire insurance policy, indirect losses, ocean and inland marine, burglary and theft insurance, multiple-line insurance. Specimen forms are analyzed to understand provisions which determine protection provisions for various property risks. Equivalent to I.I.A. Course No. 22.

• **23 CASUALTY INSURANCE (3 units)**

Three hours lecture.
Prerequisite: INSUR 21 or counseling interview.
Designed to give students an understanding of casualty risks and the means by which such hazards may be minimized by insurance. Study in this course includes general liability insurance, automobile insurance, workmen's compensation, fidelity and surety bonding, individual health insurance, life and social insurance and the collective merchandising of insurance.

• **39 FAMILY RISK MANAGEMENT (2 units)**

Two hours lecture.
Prerequisite: None.
Deals with the concepts of liability risks, personal and personnel risks and property risks. It follows a study of tort liability. Examination is made of the various insurance policies available for risk management. Study is also made of the various social programs intended to manage risk among the population.

**MANAGEMENT (MNGMT) (MGMT)**

• **53 ORAL AND NONVERBAL COMMUNICATION (3 units)**

Three hours lecture.
Prerequisite: SPCH 51 or previous speech experience.
The study and practice of speech as applied to business and personal life. A review of basic speech principles, parliamentary law, refinement of skills in interpersonal communication and group processes. MNGMT 69 recommended to be taken by Management Certificate candidates prior to this course. Not open to students with credit in SPCH 53.

• **58 LIFE/WORK PLANNING (3 units)**

Three hours lecture.
Prerequisite: None.
Life/Work Planning offers the students a unique opportunity to experience a new, detailed and realistic look at themselves, their lives and their work. It provides a step-by-step procedure for participants to examine their concerns and aspirations, define and evaluate their skills and interests, establish personal and career goals and make the decisions and plans to get there.

• **59 PERSONNEL MANAGEMENT (3 units)**

Three hours lecture.
Prerequisite: None.
Provides the student with training in management development, leadership, supervision, effective use of meetings, managing through participation, communication, how to discipline, wage and salary administration, incentives, organization, collective bargaining and all philosophy, principles and policies of a business.
60a INTRODUCTION TO SUPERVISORY TRAINING 1 (1 unit)

Three hours lecture for six weeks.
Prerequisite: Qualifying score on the College Reading Test or evaluation by instructor. An introductory course teaching current methods of supervision. Instructional emphasis will be on developing the techniques and skills required to promote harmony and productivity within the organization. Designed as a practical course to train new entry-level supervisors in the key skills of: self-management, human relations, employee supervision, planning, organizing, delegating and/or participating, and evaluating human resources and operations.

60b SUPERVISORY TRAINING 2 (1 unit)

Three hours per week for six weeks.
Prerequisite: MNGMT 60a or equivalent or evaluation by the instructor. Student should be in some form of supervisory capacity. An advanced course for training supervisors to become management oriented. To develop these major resources of the supervisor, management-mindedness, leadership, and job knowledge. Designed for supervisors to improve their skills by participating in a program of performance objectives, case studies and discussions on employee and management problems, and to develop a management-minded supervisor example.

63 WRITTEN COMMUNICATIONS (3 units)

Three hours lecture.
Prerequisite: Eligibility for ENGL 1a.
A comprehensive treatment of the principles of written communication as an important function of management. Includes analysis of the most widely used forms of business writing—the letter, the report and the memorandum—as well as applications of the associated skills of dictation and reading.

64 ADMINISTRATIVE LAW (3 units)

Three hours lecture.
Prerequisite: None.
Using, as part of the textual material, the California Administrative Code, this course acquaints the public employee with administrative law in general, and those in the private sector, how to live by the rules established under administrative law. Specifically the course is designed to inform the student of the processes of adopting rules and regulations and to enable him to understand and appreciate the various areas and problems in law relating to his particular field.

65 FUNDAMENTALS OF PUBLIC ADMINISTRATION (3 units)

Three hours lecture.
Prerequisite: None.
Introduction to the historical and contemporary status of administrative institutions, principles and practices of public administration and the process of public management. Also includes the process of public policy-formulation, governmental planning and programming and administrative decision-making.

66 PRINCIPLES OF ORGANIZATION AND MANAGEMENT (3 units)

Three hours lecture.
Prerequisite: None.
A study of formal organization, the organizational environment and organization planning and control. Topics include the nature of complex organization, decision-making, small group studies and individual behavior. Also included are planning theory, systems management and nonformal behavior.

67 FUNDAMENTALS OF FISCAL ADMINISTRATION (3 units)

Three hours lecture.
Prerequisite: None.
Surveys the field of finance, both public and private. Emphasizes current problems and basic principles of finance. Financial institutions and the instruments and procedures used for loans and investments to meet the demand for funds in the capital markets are discussed and analyzed.

68 SUPERVISION TECHNIQUES (3 units)

Three hours lecture.
Prerequisite: None.
A survey of the broad fields of management: job instruction training, conference leading, leadership training, human relations and job methods. The qualities of leadership needed by all those in a supervisory capacity are stressed. This is the first course in the management program.

69 SUPERVISION TECHNIQUES — HUMAN RELATIONS (3 units)

Three hours lecture.
Prerequisite: None.
Deals exclusively with human relations using the case problem method. The field of human relations is reviewed: leadership, communication, status, decision-making, how to handle difficult employees, motivation, personnel problems, etc.

70a—70b MANAGEMENT TOPICS (1—1 unit)

Eighteen hours lecture.
Prerequisite: None.
Workshops or seminars related to special topics of interest and concern to managers in both the private and public sectors. Topics may include, but are not limited to: employee motivation, styles of leadership, management by objectives, time management, creative problem solving, dictating effectively, interpersonal communications, and effective business writing.

70c SUPERVISING SURVIVAL SKILLS

Prerequisite: None.
Workshops or seminars related to special topics of interest and concern to managers in both the private and public sectors. Topics may include, but are not limited to: employee motivation, styles of leadership, management by objectives, time management, creative problem solving, dictating effectively, interpersonal communications, and effective business writing.
MNGMT 70 TOPICS IN MANAGEMENT (0.5 units - 1 unit) Nine hours lect per ½ unit.

70C Business Environment
70D People Skills
70E Management Skills
70F Personal Career Development
70G Management Issues
70H Labor Issues
70I Personal Development Issues
70J Financial Issues
70K A View From The Top
MARKETING
(MKTG)

• 1 FUNDAMENTALS OF MARKETING (3 units)

Three hours lecture/discussion.
Prerequisite: None. Sophomore standing recommended.
Designed to meet the needs of students for an introductory course in marketing. Emphasizes key concepts and issues underlying the modern practice of marketing. Surveys the general nature of marketing, markets, the marketing concept, buyer behavior, the marketing process and marketing organization.

53a FUNDAMENTALS OF RETAILING (3 units)

Three hours lecture.
Prerequisite: None.
Covers retail store operation — the independent retailer, the chain store, the specialty shop, the department store, etc. The operations of buying, selling, selecting of personnel, pricing, markup and markdowns are all covered. Emphasizes advertising, sales promotion, window display, interior display and credit. Experts from the field of retailing are utilized as guest speakers.

53b FUNDAMENTALS OF RETAILING (3 units)

Three hours lecture.
Prerequisite: None.
Emphasizes product information in the “hard lines” as well as the “soft lines.” Appliances, furniture, rugs, plastics, jewelry, groceries, glassware, sportswear, coats, suits, dresses and many other lines are studied. Through field trips, visual aids and guest lecturers, the latest developments in each field are brought to the student.

62 FUNDAMENTALS OF SALESMAINSHP (3 units)

Three hours lecture.
Prerequisite: None.
A study of the fundamental principles of creative selling. Prospecting, the approach, methods of presentation and demonstration, meeting objections, the close and the follow-up are covered thoroughly with frequent student participation. Special emphasis on the development of poise, improvement in personality and stimulation of confidence through training in the speech aspects of selling.

64 FUNDAMENTALS OF ADVERTISING (3 units)

Three hours lecture/discussion.
Prerequisite: None.
A survey of the field of advertising: its uses, its economic implications and its value. Emphasizes understanding and evaluating the place of advertising in our economy, rather than technical skill. Includes preparation of advertising, field trips, guest speakers and class discussions.

74a—74b RETAIL ADVERTISING (3—3 units)

Three hours lecture.
Prerequisite: None.
Introduces the many types of advertising and teaches methods of preparing finished copy and layouts. Includes history of advertising, purposes of advertising, layout, copywriting, direct advertising, radio, television and newspaper advertising.

251 PSYCHOLOGY AND HUMAN RELATIONS (1 unit)

Self-paced, twenty hours minimum lecture/laboratory, open entry/open exit.
Prerequisite: None.
Examines human relations in the setting of a marketing business, and emphasizes that a business situation requires different human relations skills than everyday personal contacts do. Identifies the ways in which successful human relations on the job create a successful employee and contributes to the success of his employer’s business.

OFFICE SKILLS
(OFF S)

• 50a BEGINNING TYPING (3 units)

Five hours lecture.
Prerequisite: Level B ENGL classification.
A study of basic techniques and drills to develop speed and accuracy. Instruction in centering, letter placement, simple tabulation, manuscripts, rough drafts, etc., are also included. Comparable to OFF S 250a (I, II, III).

• 50b INTERMEDIATE TYPING (3 units)

Five hours lecture.
Prerequisites: Completion of OFF S 50a with at least a “C” or three semesters of high school typing. Level B ENGL classification.
Designed to increase students’ facility to do machine production work and to improve typing techniques, speed and accuracy. Comparable to OFF S 250b (I, II, III).

52 FILING (1.5 units)

Three hours lecture per week for nine weeks.
Prerequisite: Level B ENGL classification.
The fundamentals, rules and procedures common to basic systems of filing. Filing equipment and supplies are used to provide instruction and practice in alphabetic, geographic, numeric and subject filing. Comparable to OFF S 252.

• 60a ADVANCED TYPING (3 units)

Five hours lecture.
Prerequisite: Completion of OFF S 50b with at least a “C”.
Designed to enable the student to type well enough by the end of the year to hold a general office position and to meet the Civil Service Requirements for Junior Typist. Comparable to OFF S 260a (I, II, III).
60b EXPERT TYPING (3 units)

Five hours lecture.
Prerequisite: For secretarial or clerical majors who have completed OFF S 60a with at least a "C".

Upon completion of this course, the student is qualified to hold a general office position requiring a high degree of typing skill. Includes letter styles, tabulations, manuscripts, rough drafts, office forms and legal documents.

65 MACHINE TRANSCRIPTION (1.5 units)

Three hours lecture per week for nine weeks.
Prerequisites: Completion of OFF S 50b with at least a "C". Completion of ENGL level A classification.

Designed to develop skill in operating transcribing machines. Practice will be given in transcribing letters, memoranda, and manuscripts from various areas of business and government. English usage, punctuation and spelling techniques are emphasized. Completion of or concurrent enrollment in OFF S 60a is highly recommended.

200 DEVELOPMENT OF FAST TRACK PROGRAM 1 unit total 10 hrs.

Self-paced, minimum of five hours per week in the Individualized Business Education Center (IBEC); open entry/open exit.

Prerequisites: OFF S 250a, Part 1—None; OFF S 250a, Part 2—OFF S 250a, Part 1, with "C" or higher; OFF S 250a, Part 3—OFF S 250a, Part 2, with "C" or higher.

Individualized typewriting instruction includes two general areas: (1) the mastery of the keyboard by touch and a knowledge of all operational parts of the typewriter; (2) the ability to apply this skill in the preparation of letters, tabulations, manuscripts and business forms. Each 1 unit of work completed will be assigned a letter grade. The complete course (3 units) is comparable to OFF S 50a.

250a BEGINNING TYPING, PARTS 1, 2, 3 (1—1—1 unit)

Self-paced, minimum of five hours per week in the Individualized Business Education Center (IBEC); open entry/open exit.

Prerequisites: OFF S 250a, Part 1—None; OFF S 250a, Part 2—OFF S 250a, Part 1, with "C" or higher OR a minimum typing placement test score of 35 NWAM; OFF S 250a, Part 3—OFF S 250a, Part 2, with "C" or higher.

Individualized intermediate typing course. Student will develop speed and accuracy and learn to type the various styles of business letters, business forms and reports, telegrams, memorandums, tabulations and manuscripts. Each 1 unit of work completed will be assigned a letter grade. The complete course (3 units) is comparable to OFF S 50b.

251 TYPING SPEED BUILDING, PARTS 1, 2, 3 (0.5 unit. Limit 1.5 units.)

A minimum of twelve hours per half unit; open entry/open exit.

Prerequisites: OFF S 251, Part 1—Minimum typing placement score of 30 NWAM; OFF S 251, Part 2—OFF S 251, Part 1, with "C" or higher; OFF S 251, Part 3—OFF S 251, Part 2, with "C" or higher.

Open-entry course with a minimum of three (3) hours of attendance per week. The student will attend approximately 12 hours for each half unit of credit.

252a FILING (1.5 units)

Self-paced, minimum of twenty-seven hours in the Individualized Business Education Center (IBEC); open entry/open exit.

Prerequisite: None.

A self-paced course in the fundamentals, rules and procedures common to basic systems of filing. Filing laboratory materials are used to provide instruction and practice in alphabetic, numeric, geographic and subject filing. Comparable to OFF S 52.

250b INTERMEDIATE TYPING, PARTS 1, 2, 3 (1—1—1 unit)

Self-paced, minimum of five hours per week in the Individualized Business Education Center (IBEC); open entry/open exit.

Prerequisites: OFF S 250b, Part 1—OFF S 250b, Part 2, with "C" or higher OR a minimum typing placement test score of 45 NWAM; OFF S 250b, Part 2—OFF S 250b, Part 1, with "C" or higher; OFF S 250b, Part 3—OFF S 250b, Part 2, with "C" or higher.

Individualized advanced typing course that prepares the student for employment competency, enabling the student to type a variety of business letters, forms, memorandums, business reports, tables and financial statements. It includes actual office style situations and projects written in a dialogue format which requires the student to analyze and organize work before actually typing it. Each 1 unit of work completed will be assigned a letter grade. The complete course (3 units) is comparable to OFF S 60a.

291 Office Skills/Word Processing 6 units, 30 hours

365 Machine Transcription 0.5 unit.

39 THE REAL ESTATE CONSUMER (3 units)

Three hours lecture.

Prerequisite: None.

An introduction to the field of real estate showing how real estate affects our individual lives as well as the community, state and nation. It will include not only the values inherent in taking an active part in planning and development of the community in which you live, but will give you a better understanding of the benefits of owning real estate. These goals will be reached through an understanding of real estate terminology and an understanding of the part real estate plays in the American economy.

51 LAND DEVELOPMENT ENGINEERING 3 units 3 hours lect.

55 ESCROW PROCEDURES I (3 units)

Three hours lecture.

Prerequisite: None.

The principles and methods of handling escrows involving title to land, sale of personal property and all other types of escrows ordinarily handled in an escrow office. Includes a study of the various forms and practices used in the drawing of the escrow instructions and the buyers' and sellers' closing statements. Also considers the duties of the escrow officers.
56 ESCROW PROCEDURES II (3 units)

Three hours lecture.
Prerequisite: R EST 55.
The student will learn the more unusual and difficult types of real estate escrows, with
evaluation of solutions to problems. The case problem method of teaching will be used
extensively.

59 PRINCIPLES OF REAL ESTATE (3 units)

Three hours lecture.
Prerequisite: None.
Fundamentals of real estate practice with emphasis on principles and terminology.
The real estate business, liens, taxes, bonds, contracts, leases, deeds and other real
estate instruments are studied in conjunction with brokerage and home ownership.
Designed for both consumers and people entering the field of real estate.

60 LEGAL ASPECTS OF REAL ESTATE (3 units)

Three hours lecture.
Prerequisite: None.
A study of California real estate law, including rights incident to property ownerships
and management, agency, contracts and application to real estate transfer,
conveyancing, probate proceedings, trusts deeds and foreclosures, as well as recent
legislation governing real estate transactions. Satisfies partial educational requirement
of State broker's examination.

61 REAL ESTATE ECONOMICS (3 units)

Three hours lecture.
Prerequisite: None.
An advanced course dealing with the nature and classification of land; business fluc-
tuations and their relationship with real estate cycles; residential and commercial
market trends; rural property and special purpose trends; economic factors affecting
the development of property, construction and subdivision. Satisfies partial education
requirement for State broker's examination.

62 REAL ESTATE FINANCE (3 units)

Three hours lecture.
Prerequisite: None.
Analysis of real estate financing, including lending policies and problems in financing
transactions in residential, apartment, commercial and special purpose properties.
Methods of financing properties emphasized. Satisfies partial educational requirement
of State broker's examination.

63 REAL ESTATE APPRAISAL (3 units)

Three hours lecture.
Prerequisite: None.
An introductory course covering the purposes of appraisals, the appraisal process and
the different approaches, methods and techniques used to determine the value of
various types of property. Emphasis will be on residential and single-unit property.
Satisfies partial educational requirement of State broker's examination.

64 REAL ESTATE PRACTICE (3 units)

Three hours lecture and discussion.
Prerequisite: Real Estate license is recommended or R EST 59.
Day-to-day operations in the typical real estate office and the role of the brokerage, in-
cluding: listing, prospecting, advertising, financing, sales techniques, escrow and
ethics. Satisfies partial requirement of State broker's examination.

65 INCOME TAX ASPECTS OF REAL ESTATE INVESTMENT (3 units)

Three hours lecture, with seminar.
Prerequisites: Some previous knowledge of taxes and/or real estate, one year of ac-
counting, REST 59, 60 and 64 are recommended.
A comprehensive introduction, for real estate investors, salespersons and developers,
to the tax principles governing the operation of business real estate. By means of prac-
tical examples, illustrations and workshop problems, real estate transactions are ex-
amined in light of their tax implications, with emphasis on tax benefits arising from
ownership in real estate. Pertinent tax law revisions are analyzed.

66 ADVANCED REAL ESTATE APPRAISAL (3 units)

Three hours lecture.
Prerequisite: R EST 63.
Deals with the principles of appraisal, the appraisal process, features of appraisal, pro-
erty considerations, appraisal techniques and professional standards of appraisers.
There will be field trips to local sites illustrating the particular principle involved in that
section of the course. The term project for each individual will consist of an actual ap-
praisal of a local apartment complex illustrating all of the factors involved in the ap-
praisal process. Satisfies partial requirement of State broker's examination.

70 TOPICS IN REAL ESTATE (1—4 units. Limit 8 units.)

Eighteen hours of instruction per unit.
Prerequisite: None.
Workshop and seminar related to special topics of interest and concern to the real
estate industry. The course may feature panels of specialists or individual speakers.
Topics may include but not limited to: investments, trusts, syndications, exchanges,
bringage administration, zoning, property management, industrial real estate,
research. May be taken four times only.

70A Salesperson Prelicensing
70B Financing Issues
70C Investment
SECRETARIAL TRAINING
(SECT)

- **10 BUSINESS CORRESPONDENCE (3 units)**

Three hours lecture.
Prerequisite: Completion of SEC T 52 or ENGL level A classification and typing ability.
Emphasizes the techniques of writing credit, collection, sales order-making, acknowledgement, adjustment and application letters as well as other types of correspondence used in business. Continued training is given in spelling, punctuation and those points of grammar especially needed by stenographers and secretaries. Fulfills three units of the English-Speech requirement for the AA degree.

- **20a ELEMENTARY GREGG SHORTHAND (4 units)**

Five hours lecture, plus two hours practice per week in Audio-Visual Laboratory.
Prerequisites: Concurrent enrollment in typing is required unless OFF S 60a has been completed. Level A ENGL classification.
A beginning course in the study of Gregg theory with dictation and transcription practice. Open to students who have had no previous shorthand or who have had one year of shorthand in high school with less than a "C" grade.

- **20b INTERMEDIATE GREGG SHORTHAND AND TRANSCRIPTION (3 units)**

Three hours of instruction plus two hours Audio-Visual laboratory per week.
Prerequisites: Completion of or concurrent enrollment in SEC T 52. Completion of SEC T 20a with at least a "C" or completion of SEC T 254b with at least a "C" or completion of two or three semesters of shorthand in high school with at least a "C" and a minimum speed of 60 words per minute for three minutes on new material dictation. Concurrent enrollment in a typing course is required unless OFF S 60a has been completed.
A continuation of SEC T 20a with concentrated practice in dictation and transcription.

- **20c ADVANCED GREGG SHORTHAND AND TRANSCRIPTION (4 units)**

Five hours lecture, plus two hours per week in Audio-Visual Laboratory.
Prerequisites: Level A ENGL classification. Completion of SEC T 20b with at least a "C" or completion of four semesters of high school shorthand with at least a "C" and a minimum speed of 80 words per minute for three minutes on new material dictation. Designed to develop shorthand skill to the expert level through the use of shortcuts and advanced word-building principles. Students receive advanced training in taking dictation and transcribing business correspondence and other appropriate business material.

52 BUSINESS ENGLISH (ENGLISH FOR SECRETARIES) (3 units)

Three hours lecture.
Prerequisites: Completion of ENGL 60 with at least a "C" or eligibility for ENGL 1. One year of high school typing or OFF S 50a or 250a.
A review of basic English usage, including a complete review of the parts of speech and sentence structure; spelling and vocabulary; punctuation rules and application; rules applicable to division of words, expression of numbers, abbreviations and capitalization. Course fulfills 3 units of the English requirement for graduation. Should be taken prior to SEC T 10 (Business Correspondence).

54 GREGG SHORTHAND REVIEW (2 units)

Three hours lecture, plus two hours practice per week in Audio-Visual Laboratory.
Prerequisites: Level A ENGL classification. Completion of one of the following: SEC T 20a with a "D"; two or three semesters of high school shorthand with a "C" or a "D"; completion of two years of high school shorthand with "D" grades. Concurrent enrollment in a typing course is required.
A review of Gregg shorthand theory with practice in dictation and transcription. Grammar, punctuation, spelling and business vocabulary are stressed. Recommended for persons who have not had shorthand for two years or more.

55a—55b SHORTHAND SKILL MAINTENANCE (1—1 unit)

One hour lecture and two hours practice in Audio-Visual Laboratory.
Prerequisite: Eligibility for SEC T 20c or completion of SEC T 20c.
Designed to help students maintain their shorthand and transcription skills while they are not taking a more advanced shorthand skill development course. Credit or no credit.

56 OFFICE PROCEDURES (3 units)

Three hours lecture.
Prerequisites: Eligibility for Level A ENGL; OFF S 50b or 250b (may be taken concurrently). Not open to first semester freshmen.
Provides training in such specialized secretarial-clerical duties as studying the role of a secretary, the organizational structure and office layout; processing incoming and outgoing mail; shipping services; telephone and telegraphic services; arranging and reporting meetings; selection of office equipment, furniture and supplies; preparing materials for various types of reproduction processes; arranging for travel for executives; studying banking services; and preparing resumes, application letters, application forms, and interviewing.
57 SECRETARIAL ACCOUNTING (1.5 units)

Three hours per week for nine weeks.
Prerequisite: None, but it is strongly recommended that BUS 53 be taken prior to or concurrent with this course.
A short-term introductory accounting course for secretarial students. It is designed to introduce accounting procedures, payroll, journals, notes and interest, financial statements and closing procedures. Not open to students with credit in ACCTG 53a, 253a or BUS A 1a.

60 WORD PROCESSING—CRT MACHINE TRAINING (1.5 units)

Four hours laboratory (minimum of thirty-six hours).
Prerequisite: Level A ENGL classification, 40 nwpm typing speed.
Students will learn the capabilities of a CRT keyboard system as well as basic operational functions of the system. Competency in preparing letters, storage and retrieval, merging data, decimal tabulations, and revising will be developed.

62 SECRETARIAL WORD PROCESSING (3 units)

Three hours per week.
Prerequisite: Level A ENGL classification.
A study of the modern word processing/administrative support concepts in the organization, operation, and control of office functions. Emphasis will be given to the secretary's dual role as an administrative assistant or as a correspondence secretary. Study will also include the role of management and career opportunities in the word processing field. Such understanding of the concepts and principles are necessary for an individual for entry into and success in newly developed positions in the field of word processing. (Formerly Word Processing 50.)

63 WORD PROCESSING/OFFICE SIMULATION (3 units)

Three hours lecture plus twenty hours by arrangement per semester.
Prerequisites: Level A ENGL classification. Typing 45 NWAM, SEC T 62 (may be taken concurrently).
This course will be operated as a word processing center using dictating, transcribing, and power typewriting equipment. During the semester, the students will work according to a rotation schedule in the various positions involved in the simulation. (Formerly Word Processing 51.)

65 LEGAL MACHINE TRANSCRIPTION (1.5 units)

Three hours lecture for nine weeks.
Prerequisites: OFF S 65 with a grade of “C” or higher and SEC T 66.
Designed to develop understanding of legal terminology and skill in transcribing legal correspondence, contracts, agreements, etc. Normally offered the second nine weeks of the semester.

66 LEGAL OFFICE PROCEDURES (3 units)

Three hours lecture and two hours typing laboratory.
Prerequisites: Completion of or concurrent enrollment in OFF S 50b and BUS 55 or BUS A 18a. ENGL level A classification.
Designed to explore the various aspects of the job of a legal secretary. Training is given in the typing of noncourt legal forms and documents, legal filing procedures, and legal office record keeping. Knowledge and usage of legal terminology is developed.

67 ADVANCED LEGAL OFFICE PROCEDURES (3 units)

Three hours lecture.
Prerequisite: SEC T 66.
Designed to develop skill in use of legal terms, foreign-language expressions, correspondence, legal papers and court documents. Civil and criminal litigation, probate, and family law are stressed.

252 BUSINESS ENGLISH (ENGLISH FOR SECRETARIES) (3 units)

Self-paced open entry/open exit. For description see SEC T 52.

253 BEGINNING SHORTHAND THEORY (2 units)

Self-paced minimum of five hours per week in the Individualized Business Education Center (IBEC); open entry/open exit.
Prerequisites: Ability to type at least 30 words per minute accurately and level A ENGL classification.
A beginning course in the study of Gregg shorthand theory with dictation and transcription practice. The student is encouraged to complete the course content at a pace that fits his or her individual learning styles. Students are required to spend a minimum of five hours per week in the Individualized Business Education Center (IBEC).

254a GREGG SHORTHAND REVIEW (2 units)

Self-paced, minimum of five hours per week in the Individualized Business Education Center (IBEC); open entry/open exit.
Prerequisite: Completion of Gregg shorthand theory; ability to type at least 30 words per minute accurately; ability to transcribe at the typewriter with 90% accuracy material dictated at 50 words per minute.
A review of Gregg shorthand theory with practice in dictation and transcription. Dictation speed range from 50 to 80 words a minute. Grammar, punctuation, spelling, and business vocabulary will be stressed. Individual Progress Method (IPM) encourages the student to complete the course content at a pace that fits his or her individual learning style. Dictation will be taken from specially prepared tapes designed to improve the student's shorthand skill. Equivalent to SEC T 54.
254b GREGG SHORTHAND REVIEW (2 units)

Self-paced, minimum of five hours per week in the Individual Business Education Center (IBEC); open entry/open exit.

Prerequisites: Completion of Gregg shorthand theory; ability to type at least 30 words per minute accurately; ability to transcribe at the typewriter with 95% accuracy material dictated at 60 words per minute.

A review of Gregg shorthand theory with practice in dictation and transcription. Dictation speeds range from 70 to 100 words a minute. Grammar, punctuation, spelling, and business vocabulary will be stressed. Individual Progress Method (IPM) encourages the student to complete the course content at a pace that fits his/her individual learning style. Dictation will be taken from specially prepared tapes designed to improve the student's shorthand skill.

COMMUNICATIONS

Broadcasting
Journalism
Special Education
Speech

The Communications Department offers courses which provide lower division training for Broadcasting, Journalism, Special Education, and Speech majors who expect to transfer at the end of their sophomore year as well as instruction leading to Certificates of Achievement in Broadcasting, Journalism and Sign Language (Interpreting).

CERTIFICATES OF ACHIEVEMENT

These training programs are designed for those students who prefer career specialization courses and the earliest possible opportunity for job placement. Students wishing more in-depth preparation may continue toward more advanced courses, an associate degree or transfer to a four-year institution.

Disciplines offering these Certificates of Achievement include: Broadcasting, Journalism and Special Education (Interpreting). Upon completion of the requirements, the student may apply for a Certificate of Achievement. Certificates are awarded subject to the approval of the discipline instructor(s) and the department chairperson.

BROADCASTING

Minimum units required – 26

Required Courses (Minimum of 23 units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>BRDCS 1a</td>
<td>Surv Radio Brdcstng</td>
<td>3.0</td>
<td>JRNL 1</td>
<td>Commun/Mass Media</td>
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<tr>
<td>BRDCS 1b</td>
<td>Surv TV Brdcstng</td>
<td>3.0</td>
<td>SPCH 18</td>
<td>Voice and Diction</td>
<td>3.0</td>
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<td>BRDCS 2</td>
<td>TV News Wrtg/Pdctn</td>
<td>3.0</td>
<td>BRDCS 2</td>
<td>Radio Production</td>
<td>3.0</td>
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<tr>
<td>SPCH 1</td>
<td>Speech Communicatn</td>
<td>3.0</td>
<td>OR</td>
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<tr>
<td>SPCH 51</td>
<td>General Speech</td>
<td>3.0</td>
<td>BRDCS 27b</td>
<td>Rad News Production</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Electives (Minimum of 3 units)

ENGL 1 Introductory Composit 4.0

Other Suggested Courses

MKTG 62 Fund Salesmanship (3); SPCH 21 Oral Interpretation (3); OFF S 50a Beginning Typing (3); W EXP 50 Coop Work Expr Educ (2–4).
JOURNALISM

Minimum units required – 27

Required Courses (Minimum of 21 units)

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<tr>
<td>JRNL 1</td>
<td>Commun/Mass Media 3.0</td>
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<tr>
<td>JRNL 2a</td>
<td>Intr Newspaper Jrnl 3.0</td>
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<tr>
<td>JRNL 2b</td>
<td>Adv Newspaper Jrnl 3.0</td>
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<td>JRNL 3</td>
<td>Intr Magazine Jrnl 3.0</td>
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<td>JRNL 15</td>
<td>Photojournalism 3.0</td>
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Electives (Minimum of 6 units)

Students may take any one of the following courses three times or any combination for no more than six units.

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<tr>
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<td>News Operations 2.0</td>
</tr>
<tr>
<td>JRNL 27b</td>
<td>Magazine Production 2.0</td>
</tr>
</tbody>
</table>

Other Suggested Courses

ART 17ab Elem Photography (3); ENGL 1 Introductory Compos (4); ENGL 1 Expository Compos (3); W EXP 50 Coop Work Expr Educ (2-4); SOC S 51 Am Pol/Econ Issues (3).

SIGN LANGUAGE (INTERPRETING)

Minimum units required – 30

Required Courses (Minimum of 24 units)

<table>
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<tr>
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<tbody>
<tr>
<td>SP ED 1</td>
<td>Int Sgng Exact Eng 3.0</td>
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<td>Beginning Ameslan 3.0</td>
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<td>SP ED 12</td>
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<td>SP ED 35c</td>
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Electives (Minimum of 6 units)

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<tr>
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<tr>
<td>SP ED 40a</td>
<td>Norml Spch/Lang Dvl 1.5</td>
</tr>
<tr>
<td>SP ED 40b</td>
<td>Spch/Lang Dvl Dsord 1.5</td>
</tr>
</tbody>
</table>

Other Suggested Courses

SP ED 40L Spch/Lang Develop Lb (1); SOC 5 Community Service (1-2); W EXP 50 Coop Work Expr Educ (2-4).

ASSOCIATE DEGREE PROGRAMS

Students expecting to transfer to an upper division institution with a major in Broadcasting, Journalism, Special Education or Speech must comply with the requirements as shown in the catalog under Graduation Requirements and should consult the catalog of the college or university of their choice for required and/or recommended courses. Counselors/advisors will assist the student in planning for an Associate Degree.

BROADCASTING

Designed to provide training for entry into the radio and television broadcasting fields.

Minimum units required in related disciplines – 25

Required Courses

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<tr>
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<tr>
<td>BRDCS 1a</td>
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<td>BRDCS 3</td>
<td>TV News Wrtg/Prdctn 3.0</td>
</tr>
<tr>
<td>BRDCS 27a</td>
<td>Radio Stat Operat 2.0</td>
</tr>
<tr>
<td>BRDCS 27b</td>
<td>Rad News Production 2.0</td>
</tr>
<tr>
<td>JRNL 1</td>
<td>Commun/Mass Media 3.0</td>
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<tr>
<td>JRNL 3</td>
<td>Magazine Journalism 3.0</td>
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<tr>
<td>SPCH 18</td>
<td>Voice and Diction 3.0</td>
</tr>
<tr>
<td>SPCH 1</td>
<td>Speech Communicatn 3.0</td>
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<tr>
<td>SPCH 2</td>
<td>Living Communicatn 3.0</td>
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</table>

JOURNALISM

Designed to provide training for entry into newspaper and magazine journalism and photojournalism.

Minimum units required in related disciplines – 22

Required Courses

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<tr>
<td>JRNL 1</td>
<td>Commun/Mass Media 3.0</td>
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<tr>
<td>JRNL 2a</td>
<td>Intr Newspaper Jrnl 3.0</td>
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<tr>
<td>JRNL 27a</td>
<td>Newsrm Operations 2-2.0</td>
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<td>JRNL 27b</td>
<td>Magazine Production 2-2.0</td>
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<td>JRNL 15</td>
<td>Photojournalism 3.0</td>
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<td>JRNL 2b Adv Newspaper Jrnl 3.0</td>
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<tr>
<td>JRNL 3</td>
<td>Intr Magazine Jrnl 3.0</td>
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<tr>
<td>JRNL 15</td>
<td>Photojournalism 3.0</td>
</tr>
<tr>
<td>SPCH 51</td>
<td>General Speech 3.0</td>
</tr>
</tbody>
</table>

Other Suggested Courses

SP ED 40L Spch/Lang Develop Lb (1); SOC 5 Community Service (1-2); W EXP 50 Coop Work Expr Educ (2-4).
SPECIAL EDUCATION (SIGN LANGUAGE EMPHASIS)

Designed to give training in sign language for the hearing impaired and for those who wish to communicate with the hearing impaired.

Minimum units required in related disciplines – 24

Required Courses

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>SPED 1</td>
<td>Intrng Sgnig Exact Eng</td>
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<tr>
<td>SPED 11</td>
<td>Beginning Ameslan</td>
<td>3.0</td>
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<tr>
<td>SPED 12</td>
<td>Intermed Ameslan</td>
<td>3.0</td>
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<tr>
<td>SPED 65</td>
<td>Sign and Song</td>
<td>3.0</td>
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<tr>
<td>SPED 13</td>
<td>Advanced Ameslan</td>
<td>3.0</td>
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<tr>
<td>SPED 63</td>
<td>Interpreting Ameslan</td>
<td>3.0</td>
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<tr>
<td>SPED 33</td>
<td>Survey Special Edu</td>
<td>3.0</td>
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<tr>
<td>SPCH 1</td>
<td>Spch Communicatn</td>
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<td>SPCH 2</td>
<td>Living Communicatn</td>
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<tr>
<td>SPCH 51</td>
<td>General Speech</td>
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Other Suggested Courses

SPED 35a Emtlly Hndcpd Child (1), SPED 35b Lrng Disabld Child (1), SPED 35c Dvlpmtl Dsabld Child (1); SPED 18 Voice and Diction (3).

SPEECH

Designed to provide training in basic oral skills in formal and informal situations.

Minimum units required in related disciplines – 25

Required Courses

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<thead>
<tr>
<th>Course Code</th>
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<tr>
<td>SPCH 1</td>
<td>Speech Communicatn</td>
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<td>SPCH 2</td>
<td>Living Communicatn</td>
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<tr>
<td>SPCH 4</td>
<td>Discuss/Conf Ldrsh</td>
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<td>SPCH 5</td>
<td>Argumentatn/Debate</td>
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<tr>
<td>SPCH 18</td>
<td>Voice and Diction</td>
<td>3.0</td>
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<tr>
<td>SPCH 27*</td>
<td>Intrcl Spch Compet</td>
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<td>SPCH 21</td>
<td>Oral Interpretion</td>
<td>3.0</td>
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<tr>
<td>SPCH 22</td>
<td>Reader’s Theatre</td>
<td>3.0</td>
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<tr>
<td>SPCH 35</td>
<td>Story Telling/Ch Lit</td>
<td>3.0</td>
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<tr>
<td>JRNL 1</td>
<td>Commun/Mass Media</td>
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*SPCH 27 may be taken four times for a total of no more than 8 units.

COURSE DESCRIPTIONS

BROADCASTING (BRDCS)

- 1a SURVEY OF RADIO BROADCASTING (3 units)
  Three hours lecture.
  Prerequisite: None.
  The student will have a general understanding of the radio broadcast industry through a survey of its historical development, social importance and basic production techniques.

- 1b SURVEY OF TELEVISION BROADCASTING (3 units)
  Three hours lecture.
  Prerequisite: None.
  The student will have a general understanding of the television broadcast industry through a survey of its historical development, social importance, equipment and production techniques.

- 2 RADIO PRODUCTION (3 units)
  Three hours lecture.
  Prerequisite: None.
  The student will understand the historical development of the broadcasting industry; vocational opportunities available in the field; the basic operation of radio consoles; the development of program logs, radio commercials, promotional and public service announcements; general techniques of announcing and conducting interviews; and, the major forms of music used in contemporary radio programming.

- 3 TV NEWS: WRITING AND PRODUCTION (3 units)
  Three hours lecture and studio.
  Prerequisite: None.
  The student will have a general knowledge of the field of television, newwriting and production. Through theoretical and practical application, the student will understand writing, filming, editing and broadcasting television news.

- 7a INTRODUCTION TO PUBLIC ACCESS TELEVISION (3 units)
  Three hours lecture/laboratory.
  Prerequisite: None.
  The student will be skilled in basic single-camera video production and editing techniques, and will understand the philosophy of public access as a communications technique operating through cable television. Manual dexterity is required.
• 20ab PORTA PAC AND EDITING (3 units)

Six hours lecture/laboratory and field trips by arrangement.
Prerequisite: None.
Designed to educate students in the proper handling and operation of the portable color video camera, recorder and editing equipment. Aesthetics in visual composition, lighting, sound and editing as well as the psychological effects that can be created within each of these areas will be stressed. Students will become familiar with in-field videotaping techniques for use in news gathering, documentary work and other out-of-studio purposes. Students will produce a complete production as well as crew for each of the other student productions. Not open to students with credit in ART 20ab.

• 27a RADIO STATION OPERATION
(1– 2 units. Limit of 4 units.)

Three hours laboratory by arrangement for one unit, Six hours laboratory by arrangement for two units.
Prerequisite: None.
The student will be involved in and gain a general knowledge of various phases of radio station operation, such as air studio operation, tape recording, editing, and script writing (except newscasting) while operating the college radio station. Manual dexterity is required. Field experience is with KBCC-FM, the college radio station.

• 27b RADIO NEWS: WRITING AND PRODUCTION
(1– 2 units. Limit of 4 units)

Three hours laboratory by arrangement for one unit, Six hours laboratory by arrangement for two units.
Prerequisite: None.
The student will have a general knowledge of the field of radio newswriting and production. Through theoretical and practical application, the student will understand writing, interviewing, taping, editing, re-writing or teletype copy and broadcasting of radio news. Field experiences are with KBCC-FM, the college radio station, and with United Press International. Manual dexterity is required.

JOURNALISM (JRNL)

• 1 COMMUNICATION AND THE MASS MEDIA (3 units)

Three hours lecture.
Prerequisite: None.
The student will have a general understanding and appreciation of the mass media through an assessment of its historical development and its role in contemporary American society. The student will be exposed to the various media (print, phonograph records, film, radio and television) including a study of minority publications. The student will recognize the media’s social, cultural and educational impact.
• 2a INTRODUCTION TO NEWSPAPER JOURNALISM (3 units)

Three hours lecture.
Prerequisite: None.
The student will have an understanding of the fundamentals of newspaper operation, organization and structure of news stories, techniques of interviewing, as well as the language and style of print media.

• 2b ADVANCED NEWSPAPER JOURNALISM (3 units)

Three hours lecture.
Prerequisite: JRNL 2a.
The student will develop skills in writing feature stories, editorials, a personalized column and reviews of events; will be familiar with newspaper production procedures and will contribute regularly to one or more of the student publications.

• 3 INTRODUCTION TO MAGAZINE JOURNALISM (3 units)

Three hours lecture.
Prerequisite: JRNL 1 or 2a.
The course will give the student a survey of the magazine publishing field. The student will understand how magazines are put together; what the problems are in publishing; why magazines fail; and what the future in the industry is. Specific magazines will be analyzed and students will outline and research a story for submission to a specific market.

• 15 PHOTOJOURNALISM (3 units)

Two hours lecture/discussion; two hours supervised laboratory.
Prerequisite: None.
The student will have an understanding and appreciation of the historical development, social importance and basic techniques of photojournalism. The student will be exposed to practical laboratory experience and will be able to apply technical skills to the printed media. All students must have a rangefinder type focusing camera. No instamatic or polaroid cameras are acceptable.

• 27a NEWSROOM OPERATION (RIP) (2—2—2 units)

One hour lecture, three hours laboratory.
Prerequisite: JRNL 2a.
Offers the student practice in reporting, headline writing, copy editing, proof reading and layout procedures. This class is designed as a production practicum; all students on the newspaper major staff should be enrolled.

• 27b MAGAZINE PRODUCTION (2—2—2 units)

One hour lecture, three hours laboratory.
Prerequisite: None.
The student will have practice in magazine style writing, headline writing, photo taking, editing and sizing, copy and proof-reading and layout techniques as applied to student publication magazines. The student will be involved in handling the publicity and distribution for the completed magazine. This course is a practical laboratory operation and all students on the magazine staffs should be enrolled.

• 27e PUBLICATIONS PHOTOGRAPHY LABORATORY (2—2—2 units)

One hour lecture, three hours laboratory.
Prerequisite: JRNL 15 or equivalent experience.
Offers the student practice in photo taking, editing and sizing, caption writing as applied to student publications. This course is practical laboratory operation, and all photojournalism students on student publication staffs should be enrolled.

• 42ab FREE-LANCE WRITING (1.5—1.5 units)

Three hours lecture.
Prerequisite: Eligibility for ENGL 1a.
Each student will read and analyze the various styles of writing in today's publishing market, and receive practical instruction and experience in contacting editors and in writing for publication. Not open to students with credit in ENGL 42ab.

51 COMMUNITY PUBLIC RELATIONS (1 unit)

Eighteen hours per semester.
Prerequisite: None.
The student will become familiar with local media expectations for lay people who will be regularly contributing information to the media. He/she will learn how to prepare material for print and/or broadcast for both print and electronic media.

52 MULTI-CULTURAL MEDIA (4 units) SUMMER

Forty hours per week for four weeks (152 hours).
Prerequisite: Students will be required to demonstrate command of basic written English skills as demonstrated by a writing sample.
Provides an opportunity for intensive introductory experience in various aspects of media communication, with specific concentration on newspaper journalism. Open to high school juniors and seniors who qualify for concurrent enrollment.
SPECIAL EDUCATION
(SP ED)

• 1 INTRODUCTION TO SIGNING EXACT ENGLISH (SEE) (3 units)

Three hours lecture.
Prerequisite: None.
The student will acquire a basic command of SEE which is the visual mode of representing English. Receptive and expressive skills are developed. SEE is the basic sign language being taught to deaf and hearing impaired children in educational systems.

• 2 ADVANCED SIGNING EXACT ENGLISH (SEE) (3 units)

Three hours lecture.
Prerequisite: SP ED 1.
The student will acquire an advanced command of SEE. Continued development of receptive and expressive skills; fngerspelling, number signing. This course provides the opportunity for a student to expand vocabulary and become proficient at Signing Exact English.

• 11 BEGINNING AMESLAN (3 units)

Three hours lecture.
Prerequisite: None.
The student will understand the fundamentals of American Sign Language (AMESLAN or A.S.L.). The student will be introduced to the history, basic grammatical structure, techniques of signing and non-verbal aspects of American Sign Language.

• 12 INTERMEDIATE AMESLAN (3 units)

Three hours lecture.
Prerequisite: SP ED 11.
The student will develop fluency in American Sign Language. Emphasis will be placed on a conceptual accuracy, numerical proficiency, and a mastering of the manual alphabet. Receptive and expressive skills will be refined. Students will be introduced to idiomatic expressions.

• 13 ADVANCED AMESLAN (3 units)

Three hours lecture.
Prerequisites: SP ED 11 and 12.
The student will be able to identify and correctly translate English idioms into sign language. The emphasis is on advanced fluency in Ameslan. The goal of this course is to provide the student with total command of AMESLAN.

• 33 SURVEY OF SPECIAL EDUCATION (3 units)

Three hours lecture.
Prerequisite: CH DV 13a or equivalent.
A survey of the field of special education emphasizing the role of the special education assistant in the training of the exceptional child. Includes an introduction to the types of handicapped children, the function of the assistant as a teacher assistant, and the vocational opportunities available. Field trips to educational facilities will be an important part of the instructional program. Not open to students with credit in CH DV 33.

• 34 PRINCIPLES AND PRACTICES IN SPECIAL EDUCATION (3 units)

Two hours lecture, four hours laboratory per week.
Prerequisite: CH DV 33/SP ED 33.
An opportunity is provided for the student to observe and participate as an assistant with trainable mentally retarded, educable mentally retarded, physically and orthopedic handicapped and educational handicapped programs at public and private schools and mental institutions. Not open to students with credit in CH DV 34.

• 35a UNDERSTANDING THE EMOTIONALLY HANDICAPPED CHILD (1 unit)

Two hours lecture for nine weeks.
Prerequisite: None.
Understanding of emotional disturbance in children, concentrating on the preschool-age and the early grade school-age child. Study of the utilization of appropriate methods of intervention for those emotionally disturbed children, both preschool-age and early grade school-age. Not open to students with credit in CH DV 35a.

• 35b UNDERSTANDING THE LEARNING DISABLED CHILD (1 unit)

Two hours lecture for nine weeks.
Prerequisite: None.
Types of learning disabilities of children will be recognized. Students will learn remedial techniques used with students having learning disabilities. Not open to students with credit in CH DV 35b.

• 35c UNDERSTANDING THE DEVELOPMENTALLY DISABLED CHILD (1 unit)

Two hours lecture for nine weeks.
Prerequisite: None.
Prepares the history of mental retardation and defines mental retardation in relation to child development. Studies teaching techniques for levels of retarded children. Not open to students with credit in CH DV 35c.
• **35d UNDERSTANDING THE PHYSICALLY HANDICAPPED CHILD** (1 unit)

Two hours lecture for nine weeks.

Prerequisite: None.

Studies physical handicaps of children and the characteristics of those handicaps. Explains mainstreaming and those responsibilities of teacher, parent, and specialist. Not open to students with credit in CH DV 35d.

• **35e WORKING WITH AUTISTIC CHILDREN** (1 unit)

Two hours lecture for nine weeks.

Prerequisite: None.

Practical application of behavior modification techniques. Not open to students with credit in CH DV 35e.

• **40a NORMAL SPEECH AND LANGUAGE DEVELOPMENT** (1.5 units)

Twenty-seven hours lecture.

Prerequisite: None.

The course may be taken on a credit/no credit basis. The student will better understand normal speech and language development in children. Sounds, words, syntax, and semantics will be assessed. This course is designed for prospective education and communication majors, school teachers and teacher aides, and parents, but is open to any interested person. This class will not substitute for similar upper division courses at four year schools but can be transferred for elective credit.

• **40b SPEECH AND LANGUAGE DEVELOPMENT DISORDERS** (1.5 units)

Twenty-seven hours lecture.

Prerequisite: None.

This course may be taken on a credit/no credit basis. The student will understand abnormal language development in children. The student will be familiar with a variety of communication disorders; stuttering, cleft palate, cerebral palsy and aphasia, as well as those caused by impaired hearing. This course is designed for prospective education and communication majors, school teachers, and teacher aides, and parents of children with speech disorders, but is open to any interested persons. This class will not substitute for similar upper division courses at four year schools but can be transferred for elective credit.

• **40L SPEECH AND LANGUAGE DEVELOPMENT LABORATORY** (1—1—1 unit.)

Three hours laboratory.

Prerequisite: SP ED 40a or 40b (may be taken concurrently).

The student will observe Kern County special education instructors and speech correctionists in clinical situations and assist them with case loads.

• **41 PSYCHOLOGICAL ASPECTS OF DISABILITY** (3 units)

Three hours lecture.

Prerequisite: None.

The student will acquire a basic understanding of the socio-psychological adjustment problems as a result of disability. Case studies will be stressed in order to provide a realistic and practical orientation for the course.

• **50 INTRODUCTION TO BRAILLE** (2 units)

Two hours lecture.

Prerequisite: None.

The development of skills in grade 2 English braille, with some exposure to Nemeth Code, format, and foreign languages. Emphasis is on transcribing print copy to braille and underlining braille copy with print. Multimedia laboratory, as necessary.

• **53 INTERPRETING AND SIGNING EXACT ENGLISH** (3 units)

Three hours lecture/demonstration.

Prerequisites: SP ED 1 and 2.

A course to develop the skills of an interpreter for the deaf using Signing Exact English. A general orientation of interpreting presented and the various roles and functions of an interpreter explored.

• **54 FINGERSPELLING** (1.5 units)

Three hours lecture for nine weeks.

Prerequisite: None.

The student will learn the manual alphabet and numerical digits used in conjunction with American Sign Language. The student will develop a fluency in expressive and receptive fingerspelling and numbers.

• **55 CULTURAL AWARENESS OF THE DEAF** (1.5 units)

Three hours lecture for nine weeks.

Prerequisite: None.

The student will better understand the cultural aspects related to the deaf population. Areas involving language barrier, rights, discrimination and every day obstacles faced by a silent minority will be discussed.

• **56 SIGN LANGUAGE SURVIVAL SKILLS** (1 unit)

Two hours lecture/demonstration for nine weeks.

Prerequisite: None.

The student will acquire a basic command of the Manual Alphabet and American Sign Language (American). Emphasis will be on both basic conversational skills used among adult deaf people in the United States, and basic survival signs used in practical occupational and emergency settings.
63 INTERPRETING AMESLAN (3 units)

Three hours lecture/demonstration.
Prerequisites: SP ED 11 and 12.
Develops the skills of an interpreter for the deaf using American Sign Language. The student will concentrate on interpreting a sight based language, as opposed to a sound based language.

64 REVERSE INTERPRETING (1.5 units)

Three hours lecture for nine weeks.
Prerequisite: SP ED 63.
The student will acquire an ability to interpret from sign to voice what is being transmitted in American Sign Language. The student will learn conceptual accuracy, appropriate vocalization and correct interpretation of idiomatic expressions of American Sign Language.

65 SIGN AND SONG (3—3 units)

Three hours lecture/laboratory.
Prerequisite: SP ED 11.
The student will be able to provide hearing impaired persons with a conceptualization of music in its lyrical and instrumental whole. The student will increase his/her AMESLAN vocabulary, clarity of signs, ability to analyze songs and literature. May be repeated one time which will give the student a better grasp of the conceptualization and creativity necessary to totally convey music through American Sign Language.

66 Interpreting Lab 10 unit total 18 hours

1 SPEECH COMMUNICATION (3 units)

Three hours lecture.
Prerequisite: Eligibility for ENGL 1a or Level A on reading assessment.
The student will be able to compose and present original speeches for a variety of speech situations in a laboratory setting and will evaluate the speeches of others. The student will select a topic of his/her own choosing; gather materials; research the subject area; organize, develop, and present his/her ideas to an audience.

2 LIVING COMMUNICATION (3 units)

Three hours lecture.
Prerequisite: Eligibility for ENGL 1a or Level A on reading assessment.
Practical application of modern theories and concepts of everyday life. The student will engage in activities illuminating the communication with the self, others, groups, family, organizations, and communication systems. The student will better understand the process of communication and its component parts.

4 DISCUSSION AND CONFERENCE LEADERSHIP (3 units)

Three hours lecture.
Prerequisite: Eligibility for SPCH 1.
Designed to train students in group processes. Instruction in the preparation and presentation of public discussions, panel, symposium, lecture-forum, and parliamentary order. Training in the collection of materials, organization of information, analysis, and criticism.

5 ARGUMENTATION AND DEBATE (3 units)

Three hours lecture.
Prerequisite: Eligibility for ENGL 1a or Level A on reading assessment.
The student will have a general understanding of both the theoretical and practical aspects of legal argumentation and public debate. The student will be involved in the areas of research, analysis, organization and delivery of research, analysis, and delivery of materials, organization and delivery through mock court and public debate situations. Pre-law, political science and history students are encouraged to enroll.

18 VOICE AND DICTION (3 units)

Three hours lecture.
Prerequisite: None.
The student will develop skills in voice production, be able to use an acceptable standard of pronunciation, improve his speech habits. He will appreciate our changing speech patterns and understand the role of the basic speech mechanism in respiration, phonation, resonation, and articulation.

21 ORAL INTERPRETATION (3 units)

Three hours per week.
Prerequisite: Eligibility for SPCH 1.
Acquisition of techniques of effective oral reading. Major interpretation projects include exercises in prose, poetry, drama and readers' theatre. Training in selection of literature, analysis, techniques of visible and audible expression. Particularly recommended for speech, English, education and drama majors.

22 READERS' THEATRE (3 units)

Three hours lecture.
Prerequisite: Eligibility for ENGL 1a or Level A on reading assessment.
Readers' Theatre is a course in the oral performance of literature. Instruction in solo interpretation, simple reading productions, staged reading productions, composite as well as chamber and story readings will be provided. Students will have an opportunity to select, adapt, script, cast, direct, and perform in a variety of productions in which the emphasis is placed on the literary text. Students will develop proficiency in oral group readings.
• 24a BEHAVIOR STYLES IN COMMUNICATION (1.5 units)

Three hours lecture/discussion for nine weeks.
Prerequisite: None.
An introduction to styles of communication which produce both desirable and undesirable results. Evaluates the communication process, ineffective communication styles and resultant failures, effective communication styles and resultant successes. Besides identifying the communication problems and desirable ways of behaving, emphasis will be on clearly outlining the steps necessary for students to actually become effective in communication style.

• 24b LEADERSHIP THROUGH EFFECTIVE COMMUNICATION (1.5 units)

Three hours lecture for nine weeks.
Prerequisite: SPCH 24a or equivalent.
A practical course designed to explore the relationship between effective communication and leadership. Emphasis will include an assessment of leadership effectiveness, personality variables, interaction variables, improving the communication climate, improving group processes, improving organizational meetings and improving performance-appraisal interviews.

• 27 INTERCOLLEGIATE SPEECH COMPETITION

(2—2—2—2 units.)

Three hours lecture and three hours laboratory by arrangement for one unit. Three hours lecture and six hours laboratory by arrangement for two units.
Prerequisite: Eligibility for SPCH 1.
Training in and application of various speech forms for intercollegiate forensic competition and community speaking. Intensive practice in prepared and limited preparation speaking events including debate, impromptu, extemporaneous, persuasive, informative, and humorous speaking; oral interpretation of literature, readers' theatre, duet interpretation, and communication analysis.

• 31a—31b—31c—31d PERSUASION IN A DEMOCRATIC SOCIETY

(1.5—1—1.5—1 units)

Three hours lecture/discussion per week. Four nine week sections as described below.
Prerequisite: Eligibility for SPCH 1.

• 31a FREEDOM OF EXPRESSION

One of a series of nine week courses under the broad title of Persuasion in a Democratic Society. Designed to analyze and evaluate the constitutional guarantees of freedom of expression with emphasis on freedom of the press. Emphasizes mass communication in a contemporary society.

• 31b FREEDOM OF SPEECH

One of a series of nine week courses under the broad title of Persuasion in a Democratic Society. Designed to analyze and evaluate the constitutional guarantees of freedom of speech. Emphasizes verbal communication in a contemporary society.

• 31c THE RHETORIC OF AGITATION

A critical analysis of the techniques of agitation and revolution with emphasis on the rhetoric of conflict in both formal and informal discourse; the values and dangers of agitation including its effect on decision making in a democratic society.

• 31d INTERRACIAL COMMUNICATION

Analysis of basic communication problems within a multi-racial society with emphasis on face-to-face interracial difficulties. Includes an involvement with cultural conflict and confrontation.

• 32 WOMEN AND THE STRUGGLE FOR EQUAL RIGHTS (3 units)

Three hours lecture/discussion.
Prerequisite: Eligibility for ENGL 1a.
A study of the women’s rights movement in the United States from its beginnings to and including the present day. Not open to students with credit in WNST 21.

• 33 THE WOMAN MANAGER IN A CHANGING ENVIRONMENT (1.5 units)

Three hours lecture per week for nine weeks.
Prerequisite: None.
The student will better understand the demands of a managerial position. Interpersonal communication, assertiveness training, leadership skills, conflict resolution and stress reduction will all be assessed as they relate to an individual’s success and failure in management. The student will better understand managerial expectations in both theoretical and practical matters. Not open to students with credit in WNST 25.

• 35 STORY TELLING AND CHILDREN’S LITERATURE (3 units)

Three hours lecture/demonstration and field practice by arrangement.
Prerequisite: Eligibility for ENGL 1.
Emphasizes oral presentation of literature for kindergarten, elementary and intermediate grades as well as evaluation, selection, reading and discussion of the literature. Not open to students with credit in ENGL 35.

• 42 PARLIAMENTARY PROCEDURE (1 unit)

Eighteen hours per semester.
Prerequisite: None.
The student will have a general understanding of the procedures used in parliamentary procedure. The student will understand the basic principles, the history of the rules of procedure, the manner in which to conduct a meeting, and the process of writing a constitution, by-laws, and rules. Designed for anyone interested in learning the accepted standards for conducting a meeting.
51 GENERAL SPEECH (3 units)
Three hours per week.
Prerequisite: None.
The student will acquire skills in a variety of oral communication situations. Listening, non-verbal, telephone, interviewing, informative and persuasive techniques will be emphasized. Practical communication experiences on both group and individual levels will be studied.

53 ORAL AND NONVERBAL COMMUNICATION (3 units)
Three hours per week.
Prerequisite: None.
The study and practice of speech as applied to business and personal life. A review of basic speech principles; parliamentary law; refinement of skills in interpersonal communication and group processes. Not open to students with credit in MGMT 53.

57ab SPECIAL PROBLEMS IN ENGLISH PRONUNCIATION FOR BILINGUAL/BICULTURAL STUDENTS (1.5-1.5 units)
Three hours lecture/laboratory. One full semester is three units. A student may enter mid-semester or stop mid-semester.
Prerequisites: 57ab: Completion of ENGL 75 and SPCH 75 series OR placement based on the Bakersfield College English as a Foreign Language Placement Test OR recommendation of any Bakersfield College instructor. Formerly SPCH 257ab; 57cd: completion of SPCH 57ab (formerly SPCH 257ab) OR Placement based on the Bakersfield College English as a Foreign Language Placement Test OR recommendation of any Bakersfield College instructor. Formerly SPCH 257c.
Designed for students who are completely fluent in English, but who have difficulty being understood at times because of a dialect or an accent. The goals of this course are to correct pronunciation errors in English by teaching how the sounds are made. Rhythm and intonation of English will be worked on, and correct stress on words in sentences and syllables in words will be taught.

75ab INTERMEDIATE LISTENING/SPEAKING ENGLISH AS A FOREIGN LANGUAGE (4 units)
75a—75b (2—2) equivalent to 75ab.
Four hours lecture/discussion.
Prerequisite: Placement based on the Bakersfield College English as a Foreign Language Placement Test.
Designed to improve the pronunciation and intonation patterns of the non-native English-speaking person. Emphasis will be placed on pronunciation, stress, rhythm and intonation, and aural comprehension.

75cd INTERMEDIATE LISTENING/SPEAKING ENGLISH AS A FOREIGN LANGUAGE (3 units)
75c—75d (1.5—1.5) equivalent to 75cd.
Three hours lecture/discussion.
Prerequisite: Placement based on the Bakersfield College English as a Foreign Language Placement Test.
Designed to improve the pronunciation and intonation patterns of the non-native English-speaking person. Emphasis will be placed on pronunciation, stress, rhythm and intonation, and aural comprehension.

*EFL—English as a Foreign Language. See also English courses for EFL students.
COMPUTER SCIENCE
DATA PROCESSING
Computer Science
Data Processing

DATA PROCESSING

Designed to prepare students for immediate employment in businesses utilizing data processing equipment. Students trained under this program are able to write computer programs. The following are typical career opportunities available to graduates of the curriculum: Operator, Programmer Trainee, Junior Programmer, or Management Trainee.

First Semester

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• 8 INTRODUCTION TO ASSEMBLY LANGUAGE (PDP—11 MACRO) (3 units)

Three hours lecture and three hours computer laboratory.
Prerequisites: One year of high school algebra or MATH A, DTA P 1 and a course on programming in a high-level language.
Fundamentals of programming PDP 11 computer systems in assembly language. Study of architecture and instruction set; use of assembly language for binary and decimal arithmetic, data editing, table handling, and bit manipulation; subprograms and subroutines; macro writing; channel programming; tape and disk file concepts; considerations for programming in a virtual storage environment. This study will concentrate on the DEC PDP 11 as the primary machine.

• 9 FUNDAMENTALS OF 8088 ASSEMBLY CODE (3 units)

Three hours lecture and one and one-half hours computer laboratory.
Prerequisites: Two years of high school mathematics, and a course on programming in a high-level language or consent of the instructor.
Fundamentals of 8088 assembly code as used on the IBM PC or IBM compatible computers. Study of architecture, 8088 instruction set, DOS, and BIOS. Emphasizes proper structure through the use of macros and procedures. Includes I/O to diskette, keyboard, screen and communication ports through DOS, BIOS, and direct interface. Concentrates on the IBM PC or XT microcomputers or IBM compatible micros as the primary machine.

• 10 THE PASCAL PROGRAMMING LANGUAGE (3 units)

Three hours lecture and three hours computer laboratory.
Prerequisite: One year of high school algebra or MATH A or equivalent.
Fundamentals of programming and operating time-shared computer systems in PASCAL. Develops skills and provides experience in using the computer as a problem solving tool in business, mathematics, physical sciences, social sciences, and other areas.

• 18 FORTRAN PROGRAMMING LANGUAGE (3 units)

Three hours lecture and three hours computer laboratory.
Prerequisite: MATH A or equivalent or evaluation by instructor.
Basic principles of computer programming. History and structure of computer systems. Solutions of problems using FORTRAN IV programming language.

• 19 FUNDAMENTALS OF APPLICATIONS PROGRAMMING (3 units)

Three hours lecture.
Prerequisites: MATH D; COM S 5 or COM S 18.
An introductory course in programming techniques and algorithms useful in science, engineering, economics and other applications. Topics include: number systems and error analysis, solutions of nonlinear equations, matrix operations, solutions to systems of linear equations, interpolation and approximation, probability and statistics, numerical differentiation and integration, graphing techniques, sort routines, file handling and structured programming. Other topics will be considered, depending on student interest. Students will use the facilities of BC's Instructional Computer Center.

• 20 ADVANCED PASCAL

Three hours laboratory.
Prerequisites: Completion of a basic course in computer science or business data processing with grade of "B" or better and evaluation by the instructor.
Individual directed work in a computer science area. Individual research problems using materials, equipment and techniques not available in larger classes. The course is designed for students who plan to use computer techniques in the academic field or future vocational application of their choice.

• 21 SPECIAL PROJECTS IN COMPUTER SCIENCE (1—1 unit)

Three hours laboratory.
Prerequisite: Completion of a basic course in computer science or business data processing with grade of "B" or better and evaluation by the instructor.
Individual directed work in a computer science area. Individual research problems using materials, equipment and techniques not available in larger classes. The course is designed for students who plan to use computer techniques in the academic field or future vocational application of their choice.

• 45 LEARNING WITH COMPUTERS (3 units)

Three hours lecture.
Prerequisite: None.
Introduction to Computer Assisted Instruction (CAI), in the use of computers in teaching. Includes an introduction to computers and programming languages, design and development of instructional software, use of computer graphics, microcomputers, and the selection and evaluation of instructional programs and computer equipment. Designed to meet the needs of elementary and high school teachers, but is open to everyone.

• 48 WORKSHOP IN COMPUTER ASSISTED INSTRUCTION (0.5—1 unit)

Eight hours of instruction per half unit.
Prerequisite: None.
The student will be given an introduction to various aspects of computer-assisted instruction and computer-managed instruction.

• 1 INTRODUCTION TO DATA PROCESSING (3 units)

Three hours lecture and one and one-half hours computer laboratory.
Prerequisite: Minimum of two years of high school mathematics or MATH A (may be taken concurrently).
Introduction to the concept of electronic data processing and the use of the computer as a problem-solving tool in business, economics, mathematics, and the various sciences. Fundamentals of the BASIC programming language in a time-shared computer system will be an integral part of the course.

• 4 COBOL PROGRAMMING LANGUAGE (3 units)

Two hours lecture and three hours computer laboratory.
Prerequisite: DTA P 1.
A continuation of programming, surveying the significant features of machine independent languages. Emphasizes the syntax and semantics of COBOL. Introduction to scientific programming.
5 DATA PROCESSING SYSTEMS (3 units)

Three hours lecture.
Prerequisite: DTA P 4 or 6 or COM S 5 or 18.
A study of systems and procedures set up by business and industry to implement the processing of accounting data required for billing, payroll, purchasing, inventory control, etc. Includes a study of integrated or total management information and data processing systems.

6 RPG PROGRAMMING LANGUAGE (3 units)

Two hours lecture and three hours computer laboratory.
Prerequisite: DTA P 1.

7 SYSTEMS ANALYSIS AND DESIGN (3 units)

Three hours lecture and one hour computer laboratory.
Prerequisite: DTA P 1 and a high-level programming language.
Introduction to types of business systems, business applications of computer systems, stages of design and analysis, alternatives, analytical tools, and systems implementation.

9 STRUCTURED PROGRAM DESIGN (1 unit)

Three hours lecture and one hour computer laboratory for six weeks.
Prerequisite: DTA P 1 or consent of the instructor.
Provides the opportunity for the student to learn sound computer programming construction and logic without having to be concerned with how the syntax of any one language is used. Covers control structures, problem analysis and definition methodology, top-down design techniques, pseudocode, structure charts, module and subroutine design, the importance of module independence, the handling of numbers, strings, and tables, the elements of good programming style, and testing and debugging techniques.

11 COMPUTER LITERACY FOR HEALTH CAREERS (1 unit)

Two hours lecture for nine weeks.
Prerequisite: Student must be accepted into one of the health career programs or be an applicant to a health career program.
Introduction to computers, including computer terminology, types of computers, general information about the operation of computers, and a survey of various types of computer languages. Emphasizes "hands-on" experience with video-display terminals, such as one might use in a career as a radiological technologist or nurse.

14 ADVANCED COBOL PROGRAMMING LANGUAGE (3 units)

Two hours lecture and three hours computer laboratory.
Prerequisite: DTA P 4 or recommendation of instructor.
An advanced course in procedural oriented language programming in COBOL, the Common Business Oriented Language. Emphasis will be placed on nonsequential file organization and maintenance and programming algorithms. Students will design, write, code, test and debug programs for typical applications. Laboratory experience will be provided on available minicomputer or mainframe equipment.

15 ADVANCED BASIC PROGRAMMING LANGUAGE (3 units)

Three hours lecture and three hours computer laboratory.
Prerequisite: COM S 5 or equivalent.
Advanced applications topics in using the BASIC programming language (Beginner's All-purpose Symbolic Instruction Code). Emphasis in programming for business. Topics will include use of files (sequential, virtual, and random access), formatting, arrays and matrices, tape storage, as well as use of peripheral devices.

22 BUSINESS DATABASE SYSTEMS (3 units)

Three hours lecture and one and one-half hours computer laboratory.
Prerequisites: DTA P 1 and 4.
Practical problems in the use of information storage and retrieval techniques. Includes sequential and random file organization, building and using directories, developing hashing algorithms using an inverted file structure and other file management techniques.

24 INTRODUCTION TO LOTUS 1-2-3 (1 unit)

One hour lecture and one hour computer laboratory for nine weeks.
Prerequisite: None.
Uses the LOTUS 1-2-3 spreadsheet program, including setting up a spreadsheet, reading from and dumping to a database, cell data entry, formulas, and options.

25 INTRODUCTION TO WORDSTAR (1 unit)

Two hours lecture and one hour computer laboratory for nine weeks.
Prerequisite: None.
Uses the WordStar word processing system, including the command structure, entry to and exit from a processing session, file creation and change, cutting and pasting, tables, print options and printing, and file handling options.

26 INTRODUCTION TO COMPUTING (TV) (2 units)

Twenty lesson television series.
Prerequisite: None.
The student will become acquainted with hardware and software fundamentals, computer language, and programming logic. They will follow the development of a computer system to solve a typical problem. They will study the computer's role in management decision making and in society at large.
• 40 COMPUTERS AND SOCIETY (TV) (2 units)

Thirteen lesson television series, plus two review sessions.
Prerequisite: None.
Students will become acquainted with the evolution of computers; the impact of the "microelectronic revolution" on society; the growing use of information and how that information is gathered and dispensed; the new world of personal computing; the area of television and its implications; technology and its "humanization"; the biochemical applications of technology; transnational flow of information; sensing and modeling; simulations; "electronic medicine"; machine memory and storage; electronic music; new perspectives and implications of all these new devices; concepts; and techniques.

52. INTRODUCTION TO THE MICROCOMPUTER/IBM PC UNIT (18 hrs. total)
250a KEYBOARDING (1 unit)
104 PC File Unit (18 hrs. total)
Self-paced, minimum of five hours per week in the Individualized Business Education Center (IBEC); open entry/open exit.
Prerequisite: None.
An individualized keyboarding course stressing two general areas: (1) the mastery of the typewriter keyboard by touch and (2) knowledge of operational parts of the typewriter.

COURSE DESCRIPTIONS

COUNSELING

There are no degree or certificate programs in Counseling at the two-year college level. The courses described below are taught by counselors to help students decide on a career and to meet their educational goals.

COURSE DESCRIPTIONS

COUNSELING (COUNS)

• 1 INTRODUCTION TO COLLEGE (0.5 unit)
One hour lecture for nine weeks.
Prerequisite: None.
Designed to assist students to become acquainted with the college requirements and to help them in making educational plans.

• 2 STUDY SKILLS (0.5 unit)
One hour lecture for nine weeks.
Prerequisite: None.
The various study approaches which are applicable to different types of college assignments, procedures of note taking, skills in the use of the library in researching for term papers and examination competence.

• 3 CAREER PLANNING (0.5 unit)
One hour lecture for nine weeks.
Prerequisite: None.
Designed to assist students in making realistic occupational choices. Students complete a battery of educational-vocational tests, make a careful study of related occupational information, and are assisted by counselors in an evaluation of the results.

• 4 CONTEMPORARY CONCERNS SEMINAR (1-1-1-1 unit)
Eighteen hours lecture. Each topic may be taken only once.
Prerequisite: None.
Discussions of current topics of interest and significance to students. The topics are to be timely and relevant to student needs.

• 5 CAREER AND LIFE PLANNING (1 unit)
Minimum of eighteen hours lecture per unit.
Prerequisite: None.
A concentrated exposure to ways of successfully dealing with problems of college study and college life.

CORRECTIONAL ADMINISTRATION
See Public Service

COSMETOLOGY
See Family and Consumer Education
12 CAREER DEVELOPMENT/SELF-ASSESSMENT (1 unit)

One hour lecture.
Prerequisite: None.
Students’ attention will be focused on values and the decision making processes. Students will examine personal, career, and educational alternatives through structured exercises and self-assessment instruments. Learning and using planning skills will enable this examination. Students will learn that considered decisions maximize personal choice.

13 CAREER DEVELOPMENT/JOB SEARCHING (1 unit)

One hour lecture.
Prerequisite: None.
Focuses on the processes of career decision-making and career development as a life-long endeavor. Emphasis will be given on how to improve one’s job hunting efforts.

14 CAREER OPTIONS: DISCOVERING YOURSELF AND YOUR CAREER (3 units)

Three hours lecture.
Prerequisite: None.
Includes the content of COUNS 11 Career and Life Planning (1 unit), COUNS 12 Career Development/Self-Assessment (1 unit) and COUNS 13 Career Development/Job Searching (1 unit). COUNS 14 may be offered as a variable units course (1–2–3).

15 Career Shadowing ½ unit 1 hour (Wn.St. 15)

48 PEER COUNSELING TECHNIQUES (3 units)

Three hours lecture.
Prerequisites: COUNS 1 or 11, and PSYCH 44 (may be taken concurrently).
The student will develop an understanding and awareness of self as he or she relates to others. The student will develop an understanding of the ways of establishing a helping relationship. The student will demonstrate both communication skills and information processes involved in the helping relationship.

49 PRACTICUM IN PEER COUNSELING (1–2 units. Limit 8 units.)

50 CHOICES AND CHALLENGES 3 units 3 lect. (Wn.St. 50)

Three to six hours lecture.
Prerequisite: COUNS 48 (may be taken concurrently).
The practical application of “Peer Counseling”: actual day to day working with students in helping relationships involving the handling of test data, services and resources of college and community.

76 INTRODUCTION TO COSMETOLOGY (1 unit)

Two hours lecture for nine weeks.
Prerequisite: None.
Understanding of the field of cosmetology, the job opportunities in the field, the skills and need for competency in the field, and policies and procedures of the Bakersfield College Cosmetology Program. (Not open to students with credit in COSMT 76.)

DATA PROCESSING
See Computer Science

DENTAL ASSISTING
See Health Careers

ECONOMICS
See Social Science—International Education

ELECTRONICS TECHNOLOGY
See Industrial Education

EMERGENCY MEDICAL TECHNICIAN
See Health Careers

ENGINEERING
See Physical Science
Studies in English provide preparation for the professions, government service, and politics. Career opportunities in English include teaching, journalism, publishing, advertising, and copywriting.

Students seeking an Associate Degree must take a writing course, either English 1 or 1a, and may take a literature class in fulfillment of the humanities requirement. Students seeking a Baccalaureate Degree should take English 1a and may take English 1b and other literature courses in fulfillment of specific General Education requirements. Students planning to major in English should take English 1a and may take English 1b and other literature courses in fulfillment of specific General Education requirements. Students planning to major in English should take English 1a and may take English 1b and other literature courses in fulfillment of specific General Education requirements. Students planning to major in English should take English 1a and may take English 1b and other literature courses in fulfillment of specific General Education requirements. Students planning to major in English should take English 1a and may take English 1b and other literature courses in fulfillment of specific General Education requirements. Students planning to major in English should take English 1a and may take English 1b and other literature courses in fulfillment of specific General Education requirements.

ELIGIBILITY

Eligibility for English classes depends upon a student's writing ability. English 60, 1 and 1a are sequential courses designed to develop proficiency in writing. Students are placed in the sequence at the level appropriate to their skill. To determine the appropriate level, Bakersfield College administers an objective English Classification Test to entering students. Students who classify Level A are eligible for English 1; Level B, for English 60; and Level C, for English 60 with Learning Skills 201, English 63, or English 64 recommended to be taken concurrently with or prior to English 60.

If students feel the objective test classification is inappropriate for their writing skill, they are urged to take the Advanced Placement Essay Test which may raise their level. Students with a Level A objective test classification who write a superior Advanced Placement Essay may be exempted from English 1 and placed in English 1a.

After a student begins the English 60, 1, 1a sequence, the student must earn a grade of “C” or better in the preceding course to move to the next level. For example, he/she must earn a grade of “C” in English 60 to be eligible for English 1, a grade of “C” in English 1 to be eligible for English 1a. Eligibility for other English courses, including literature courses, depends upon the student’s eligibility in the composition sequence. Note the prerequisite for each course.

ENGLISH
English
English and Speech Courses for Students of English as a Foreign Language
English Courses for EFL Students
Learning Skills Modules for EFL Students
Speech Courses for EFL Students

COURSE DESCRIPTIONS

ENGLISH (ENGL)

• 1 INTRODUCTORY COMPOSITION (3—4 units)

Three or four hours lecture.
Prerequisite: Level A classification or a grade of “C” or higher in ENGL 60.
Satisfies the General Education requirement in written English for the AA and AS Degrees and prepares transfer students for ENGL 1a. Emphasizes the competent writing of complete essays using exposition and argumentation. In Continuing Education and Summer Session, ENGL 1 is a three hour per week, three unit course.

• 1a EXPOSITORY COMPOSITION (3 units)

Three hours lecture.
Prerequisite: Level A classification plus a successful advanced placement essay or a grade of “C” in ENGL 1.

• 1b INTRODUCTION TO TYPES OF LITERATURE (3 units)

Three hours lecture.
Prerequisite: Eligibility for ENGL 1a.

An introductory course in literature, comprising critical analysis of notable works in prose fiction, drama and poetry, with emphasis on evaluating the logical relationship between form and content and on formulating criteria for artistic judgment. Continued instruction in the communication skills of writing, listening and discussing.

• 5a—5b SURVEY OF ENGLISH LITERATURE TO 1900 (3—3 units)

Three hours lecture.
Prerequisite: Eligibility for ENGL 1a.
The history of English literature with emphasis on the critical reading of representative works from Chaucer to 1900. Required for students whose major or minor is English and recommended for students who desire to extend their knowledge of the literary tradition.

• 11 TWENTIETH CENTURY DRAMA (3 units)

Three hours lecture.
Prerequisite: Eligibility for ENGL 1a.
An average of three hours per week of lecture, discussion, and viewing of plays on film. A study of contemporary world drama, utilizing American and European film productions. Emphasizes dramatic literature and concentrates on past and present theatre movements as well as the merits of the play.
• 12 MODERN SHORT FICTION (3 units)

Three hours lecture.
Prerequisite: Eligibility for ENGL 1a.
The student will read a selection of modern short stories and learn to identify such elements as plot, character, theme, point of view, tone and symbol. He/she will develop an understanding of the evolution of the modern story. He/she will practice writing about personal reactions and objective analyses.

• 21 BLACK LITERATURE (3 units)

Three hours lecture.
Prerequisite: Eligibility for ENGL 1a.
The study of the Black Experience through literature. The contribution of noted Black authors in prose, poetry and drama.

• 23a–23b WOMEN IN LITERATURE (3–3 units)

Three hours lecture.
Prerequisite: Eligibility for ENGL 1a.
Women in Literature: Virgin, Demon, Goddess, Temptress, Child, Nymph and Mother; these are the mythical types of the women in literature. Views the role of the woman as a character type, the woman as writer, and the woman as critic. Selected readings include both male and female writers. Central to the course is a consideration of the question, “Can a woman have an identity exclusive of the male-female relationship?” Not open to students with credit in WN ST 23a–23b.

• 28 CLASSICAL MYTHOLOGY (3 units)

Three hours lecture.
Prerequisite: Eligibility for ENGL 1a.
Designed to acquaint the student with the body of Greek and Roman myths and to consider the various ways these myths survive in our culture today.

• 30a–30b SURVEY OF AMERICAN LITERATURE (3–3 units)

Three hours lecture.
Prerequisite: Eligibility for ENGL 1a. 30a is not prerequisite to 30b.
A study of the most notable American authors from the Revolutionary period to the present with emphasis on the intrinsic values of the literature. Recommended as an elective for majors in any of the humanities, in history or in education.

• 31a LATIN AMERICAN AND MEXICAN LITERATURE (3 units)

Three hours lecture.
Prerequisite: Eligibility for ENGL 1a.
A survey of the literature of Mexico and Latin America. Introduces the most representative works of Mexican and Latin American writers. Special emphasis on works that best reflect the spirit of social and political change in Mexico and the rest of Latin America. Not open to students with credit in CH ST 31a.

• 31b CHICANO LITERATURE (3 units)

Three hours lecture.
Prerequisite: Eligibility for ENGL 1a.
A bilingual (Spanish-English) analysis and criticism of Chicano literature in the United States. Introduces the contemporary literature of the Chicano and its literary and content development. Emphasizes the Chicano novel, short story, essay, poetry and teatro. Not open to students with credit in CH ST 31b.

• 34 INTRODUCTION TO BOOKS AND LIBRARIES (2 units)

Two hours lecture.
Prerequisite: Eligibility for ENGL 1a.
Designed to increase efficiency in finding information, broaden knowledge of library resources, develop skills in compiling bibliographies and suggest methods of personal enrichment through books and library materials.

• 35 STORY TELLING AND CHILDREN'S LITERATURE (3 units)

Three hours lecture/demonstration and field practice by arrangement.
Prerequisite: Eligibility for ENGL 1.
Emphasizes oral presentation of literature for kindergarten, elementary and intermediate grades as well as evaluation, selection, reading and discussion of the literature. Not open to students with credit in SPCH 35.

• 41a–41b INTRODUCTION TO CREATIVE WRITING (3–3 units)

Three hours lecture.
Prerequisite: Eligibility for ENGL 1a.
A course in the writing of poems and short stories, with emphasis on the control of language. The lectures cover the use of sound, imagery, and sense in poetry; the elements of character, plot, theme, and point of view in fiction; and the importance of creative choice to the writer.

• 41c–41d INTRODUCTION TO CREATIVE WRITING (2–2 units)

Three hours lecture.
Prerequisite: Eligibility for ENGL 1a.
A course in the writing of poems and short stories, with emphasis on the control of language. The lectures cover the use of sound, imagery, and sense in poetry; the elements of character, plot, theme, and point of view in fiction; and the importance of creative choice to the writer.

• 60 BASIC USAGE AND GRAMMAR (3–4 units)

Three or four hours lecture.
Prerequisite: None.
A comprehensive review of the fundamentals of correct English. Intensive drill on usage and spelling. Sentence and paragraph writing to test the student's application of these mechanics.

• Special Problems COMP/EFL (1-1-1 unit)

Three or four hours lecture.
Prerequisite: None.
A comprehensive review of the fundamentals of correct English. Intensive drill on usage and spelling. Sentence and paragraph writing to test the student's application of these mechanics.
63 BEGINNING VOCABULARY DEVELOPMENT (3 units)

Three hours lecture.
Prerequisite: None.
Strategies for vocabulary development including the use of context clues, word analysis, dictionary and thesaurus. Practice in applying strategies to textbooks, newspapers, magazines, and fiction. Instruction in distinguishing among commonly confused words and recognizing multiple meanings. Elementary principles of language, including how words enter the language, connotation, denotation, and usage. Emphasis upon using new words in students’ own speech and writing.

64 LANGUAGE STUDY AND VOCABULARY DEVELOPMENT (3 units)

Three hours lecture.
Prerequisite: None.
Presents basic concepts of present-day English, its development and its employment for practical communication. Provides practice in a variety of vocabulary-building techniques. Recommended for career education students. May not be used as an avenue into ENGL 1.

65 MODERN CULTURE AND THE POPULAR ARTS (3 units)

Three hours lecture.
Prerequisite: None.
A study of the cultural and social aspects of life as reflected by the popular arts, including the place and nature of art, the quality of life in our society, and cultural change. A general education course which includes study of art, music, literature, and philosophy. Recommended but not limited to students who are unlikely to take other courses in the humanities.

69abc READING AND DISCUSSION OF AMERICAN CULTURE FOR FOREIGN STUDENTS (3 units)*

69a—69b—69c (1—1—1) equivalent to 69abc.
Three hours lecture/discussion for six weeks.
Prerequisite: Completion of ENGL 75d with a grade of “C” or higher OR advanced placement based on the Bakersfield College English as a Foreign Language Placement Test.
Designed for advanced level EFL students. Provides a transition in language learning from a rigidly-controlled setting toward a less-structured classroom approach. The student will learn to read unadapted material, ask questions, participate in discussions, and use English structures and idioms.

71a—71b—71c SPECIAL GRAMMAR REVIEW (1—1—1 unit)

Three hours lecture/discussion for six weeks.
Prerequisite: None.
The student will be prepared to function more effectively in ENGL 60 as a result of having received a comprehensive review of the parts of speech and their function, of commonly used sentence patterns, of common contractional and their homonymic possessive pronoun forms, of capitalization, hyphenation, punctuation, and possessive noun forms.

75ab INTERMEDIATE ENGLISH AS A FOREIGN LANGUAGE (4 units)*

75a—75b (2—2) equivalent to 75ab.
Four hours lecture/discussion/laboratory for nine weeks.
Prerequisite: A score of 500 on the Test of English as a Foreign Language (TOEFL) OR placement based on the Bakersfield College English as a Foreign Language Placement Test OR verification by a Bakersfield College EFL instructor that the student has a working knowledge of English sufficient to complete courses at Bakersfield College.
Offers instruction in intermediate-level reading and writing and in basic English grammar.

75c—75d (1.5—1.5) equivalent to 75cd.
Three hours lecture/discussion/laboratory for nine weeks.
Prerequisite: A grade of “C” or higher in ENGL 75a OR placement based on the Bakersfield College English as a Foreign Language Placement Test.
The student will learn to use complex English structures and to combine them in complex sentences in meaningful contexts. The student will also learn to read equally complex English prose which incorporates vocabulary and idioms found in college textbooks. Intended to be a transition course which will prepare the EFL student for ENGL 60. It is not meant to replace ENGL 60.

76ab TYPING ENGLISH FOR FOREIGN STUDENTS (3 units)*

76a—76b (1.5—1.5) equivalent to 76ab.
Three hours lecture and laboratory for nine weeks.
Prerequisite: None. Recommended to be taken concurrently with ENGL 75 courses.
A supplementary course for EFL students. Provides reinforcement of spelling and basic English sentence patterns through instruction in handwriting and typing. It will not substitute for the ENGL 75 series which systematically teaches English grammar, reading and writing.
76cd TYPING ENGLISH FOR FOREIGN STUDENTS (3 units) *

ABCDEF I N T E R M E D I A T E WRITING PRACTICE FOR FOREIGN & BICULTURAL AMERICAN STUDENTS

76c—76d (1.5—1.5) equivalent to 76cd.
Three hours lecture/laboratory for nine weeks.
Prerequisite: None. Recommended to be taken concurrently with ENGL 75 courses.
A supplementary course for EFL students. Provides reinforcement of spelling and basic English sentence patterns through instruction in handwriting and typing. It will not substitute for the ENGL 75 series which systematically teaches English grammar, reading and writing.

79 BASIC USAGE AND GRAMMAR/EFL (3-4 units) 3 to 4 hrs/ wk

200 SPECIAL PROBLEMS IN ENGLISH COMPOSITION (0.5—3 units) (Limit 3 units)

Two to three hours lecture/discussion/laboratory. Eighteen hours of classroom instruction per unit. Maximum of three units. Open entry/open exit.
Prerequisite: Completion of ENGL 60 with a grade of "C" or higher OR placement or enrollment in ENGL 1 or recommendation of any Bakersfield College English instructor.
Provides specific intensive instruction and training in areas of expository or argumentative composition which the student has not yet mastered. The student will write compositions and complete prescribed remedial exercises to improve his or her writing skills.

257ab SPECIAL PROBLEMS IN ENGLISH COMPOSITION FOR BILINGUAL/BICULTURAL STUDENTS (0.5—6 units) *

260 BASIC USAGE AND GRAMMAR (3—4 units)
Self-paced open entry/open exit. For description, see ENGL 60.

264 LANGUAGE STUDY AND VOCABULARY DEVELOPMENT (3 units)
Self-paced open entry/open exit. For description, see ENGL 64.

Three hours lecture/discussion/laboratory. Eighteen hours of instruction per unit. Open entry/open exit.
Prerequisite: Completion of ENGL 60 with a grade of "C" or higher OR placement based on the Bakersfield College English as a Foreign Language Placement Test OR recommendation of any Bakersfield College English instructor.
Provides specific intensive instruction and training in areas of composition which the student has not yet mastered. The student will write compositions and complete prescribed remedial exercises to improve his or her writing skills.

S SPELLING IMPROVEMENT (1 unit)

One hour lecture.
Prerequisite: None.
A course in basic spelling, including the use of the apostrophe. Open to all students.

*EFL—English as a Foreign Language
See also Speech Courses for EFL students
ENGLISH AND SPEECH COURSES FOR STUDENTS
OF ENGLISH AS A FOREIGN LANGUAGE (EFL)

Bakersfield College offers a complete program of courses for the EFL student, including English and speech courses at the intermediate and advanced levels as well as special sections of regular English courses and individualized modules in the Learning Center. A comprehensive testing program has been especially designed to insure that all foreign students are placed in the courses which will best suit their needs. ALL EFL STUDENTS ARE URGED TO TAKE THE BAKERSFIELD COLLEGE ENGLISH AS A FOREIGN LANGUAGE PLACEMENT TEST. Those who do not take this test will be required to begin their English instruction with English 75a. Some students may find, however, that the test will show that their English language skills are good enough that they can begin with the more advanced courses.

An International Student Advisor is available in the International Student Center to assist with scheduling of courses and to discuss academic as well as personal problems. All international students and other students for whom English is a foreign language are urged to visit the Center and take advantage of the services offered there.

ENGLISH COURSES FOR
EFL* STUDENTS

For course descriptions of below courses, see English course listings.

60 BASIC USAGE AND GRAMMAR (3 units)

Special section of English 60 for bilingual/bicultural students.

63 BEGINNING VOCABULARY DEVELOPMENT (3 units)

69abc READING AND DISCUSSION OF AMERICAN CULTURE FOR FOREIGN STUDENTS (3 units)

75a—75b INTERMEDIATE ENGLISH AS A FOREIGN LANGUAGE (2—2 units)

75c—75d COLLEGE ENGLISH AS A FOREIGN LANGUAGE (1.5—1.5 units)

76a—76b TYPING ENGLISH FOR FOREIGN STUDENTS (1.5—1.5 units)

76c—76d TYPING ENGLISH FOR FOREIGN STUDENTS (1.5—1.5 units)

257ab SPECIAL PROBLEMS IN ENGLISH COMPOSITION FOR BILINGUAL/BICULTURAL STUDENTS (0.5—6 units)

LEARNING SKILLS MODULES FOR EFL* STUDENTS

70a—e STUDY SKILLS (0.5—2.5 units)

EFL students will receive assistance in developing effective study skills. For general description and listing of mini-courses, see Learning Skills 70a—e.

201 COMMUNICATION SKILLS (0.5—3 units)

EFL students may work with self-paced instructional modules on different aspects of language such as spelling, idioms, verb tenses, articles, prepositions, two-word verbs, and other grammatical elements. For general course description, see Learning Skills 201.

SPEECH COURSES FOR EFL* STUDENTS

For course descriptions of below Speech courses, see Speech course listings.

18 VOICE AND DICTION (3 units)

Advanced instruction in speech production for greater fluency. For course description, see Speech 18.

75a—75b INTERMEDIATE LISTENING/SPEAKING ENGLISH AS A FOREIGN LANGUAGE (2—2 units)

75c—75d INTERMEDIATE LISTENING/SPEAKING ENGLISH AS A FOREIGN LANGUAGE (1.5—1.5 units)

257ab SPECIAL PROBLEMS IN ENGLISH PRONUNCIATION FOR BILINGUAL/BICULTURAL STUDENTS (0.5—6 units)

*EFL—English as a Foreign Language
ETHNIC STUDIES
Black Studies
Chicano Studies
Related Ethnic Studies
Courses

The Ethnic Studies curriculum consists of three areas: Black Studies, Chicano Studies and related courses which have special significance to racial minorities and to the general student. These courses will normally be listed within the appropriate subject areas.

Several universities and state colleges have established ethnic studies majors. These may be specialized as Black or Chicano studies or combined as Ethnic Studies. Students intending to transfer in these major areas should consult the catalog of the transfer institution. At Bakersfield College a student completing 18 units in either Black or Chicano studies in combination with related courses will qualify as a major in that area.

COURSE DESCRIPTIONS

BLACK STUDIES

The Black Studies Program as part of Ethnic Studies is designed to promote academic awareness and develop a sensitivity to the historical, cultural and social development of this particular group of people. Courses are described below.

ANTH 5a AFRICAN ANTHROPOLOGY (3 units)

Three hours lecture.
Prerequisite: None.
The descriptive study of representative cultures of Sub-Saharan Africa. Analysis and systematic description of social structure including community, kinship and family, social institutions and organization, industries and arts in view of environment, historical development and functional interrelation. Includes methods of ethnologic research and evaluation as represented by readings in text.

ART 35 AFRICAN AND AFRO-AMERICAN ART (3 units)

Three hours lecture/discussion.
Prerequisite: None.
A survey of the black tradition in artifacts, sculpture and painting from prehistoric times in Africa to the twentieth century in Africa and America. Begins with early cave paintings and covers the arts of families, tribes and peoples through the colonization period and ends with a survey of contemporary Africans and Afro-Americans.

- ENGL 21 BLACK LITERATURE (3 units)
  Three hours lecture.
  Prerequisite: Eligibility for ENGL 1a.
  The study of the Black Experience through literature. The contribution of noted Black authors in prose, poetry and drama.

- HIST 20a—20b BLACK HISTORY (3—3 units)
  Three hours lecture.
  Prerequisite: None.
  A survey of the role and contribution of the Black American to United States history. A history of the Blacks in America from African beginnings to the present. Fulfills code requirements in the U.S. Constitution, American history and institutions and California state and local government. 20a includes a study of the U.S. Constitution and federal government. 20b includes a study of California state and local government.

CHICANO STUDIES

CHICANO STUDIES CERTIFICATE

The Chicano Studies Program offers students the opportunity to learn about the history, culture, and socio-economic characteristics of the Mexican people living and working in the United States and Mexico. The program is an interdisciplinary curriculum in which a student may receive credit as a discipline course such as, English, History, Sociology, Anthropology, Art, Music, Psychology, Philosophy, Political Science, or Women's Studies.

REQUIREMENTS FOR CHICANO STUDIES CERTIFICATE

A. Six units from the Social Sciences and Behavioral Sciences: CH ST 5b (Anth 5b); CH ST 30a (Hist 30a); CH ST 30b (Hist 30b); CH ST 36 (Soc 36); CH ST 36L (Soc 36L); CH ST 38a, 38b, 38c.
B. Three units from the Humanities: CH ST 31a (Eng 31a); CH ST 31b (Eng 31b); CH ST 32a (Art 32a); CH ST 32b (Art 32b); CH ST 33a (Eng 33a); CH ST 34 (Music 34); CH ST 35 (Phil 35).
C. Six units from any of the following Spanish classes: SPAN 1ab, 2ab, 3, 4, 5a, 5b, 52a, 52b, 52c.
D. Three units in approved English class in consultation with a counselor or advisor.
E. Six additional units chosen from either A or B.
F. To receive a certificate in Chicano Studies a student must complete work with a "C" average (2.0 grade point average), and must have taken at least 12 or the required 24 units at Bakersfield College.
ASSOCIATE IN ARTS PROGRAM

A student completing 18 units in Chicano Studies out of the 60 units required for the AA degree will qualify for a major in that area. Students wishing to transfer in this major should consult the catalog of the transfer institution. Several universities and state colleges have established Chicano Studies majors and minors.

A student wishing to become a teacher in BILINGUAL EDUCATION is encouraged to major in Chicano Studies. The above outlined course of study is recommended. Additionally, teacher aides from local school districts are encouraged to pursue this course of study.

Minimum units required — 18

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<tr>
<td>CH ST 5b People of Mexico 3.0</td>
<td>CH ST 32a Art/Latin America 3.0</td>
</tr>
<tr>
<td>CH ST 30a History of Mexico 3.0</td>
<td>CH ST 32b Mexican/Chicano Art 3.0</td>
</tr>
<tr>
<td>CH ST 30b Chicano History 3.0</td>
<td>CH ST 34 Mexican/Chicano Music 3.0</td>
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<tr>
<td>CH ST 31a Latin/Am Mexican Lit 3.0</td>
<td>CH ST 35 Mexican Philosophy 3.0</td>
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<tr>
<td>CH ST 31b Chicano Literature 3.0</td>
<td>CH ST 36L Fldwork Chicano Soc 2.0</td>
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<td>CH ST 38abcTopics/Biling Educ 3.0</td>
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Other Suggested Courses:

SOC 21 Race and Poverty (3), SPAN courses.

COURSES RELATED TO CHICANO STUDIES

BASIC SUBJECTS

<table>
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<tr>
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<td>ENGL 1 Introductory Composition (Chicano) 4.0</td>
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SPANISH CLASSES

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<td>SPAN 52a El Convers Spanish 2.0</td>
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<tr>
<td>SPAN 3 Intermediate Spanish 4.0</td>
<td>SPAN 52b El Convers Spanish 2.0</td>
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<tr>
<td>SPAN 4 Intermediate Spanish 4.0</td>
<td>SPAN 52c Int Conver Spanish 2.0</td>
</tr>
<tr>
<td>SPAN 5ab Advanced Spanish 4.0</td>
<td>SPAN 52d Int Conver Spanish 2.0</td>
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</tbody>
</table>

COURSE DESCRIPTIONS

CHICANO STUDIES

(CH ST)

- **5b PEOPLES OF MEXICO (3 units)**
  Three hours lecture/discussion.
  Prerequisite: None.
  A survey course of the representative Pre-Columbian cultures of Meso-America. Analysis and systematic description of the archaeological, ethnological and ethnographical theories of the development of Pre-Columbian peoples. Emphasis centers on an examination of the cultures of the Olmecs, Maya, Toltecs, and Aztecs. (Not open to students with credit in ANTH 5b.)

- **24 CONTEMPORARY ISSUES AND THE CHICANA (2 units)**
  Three hours lecture/discussion for twelve weeks.
  Prerequisite: None.
  A survey of the changing psychological and social conditions of the Chicana as they pertain to the economic, political, and family developments within the Chicano culture context. An analysis of specific issues such as housing, health, and employment will be made in their specific relationships with chicanas in relation to the broad areas of the economy, the family and politics. (Identical to WN ST 24.)

- **26 CHICANO ORGANIZATIONS AND PUBLIC INSTITUTIONS (3 units)**
  Three hours lecture and discussion.
  Prerequisite: None.
  Provides an understanding of the interaction between public institutions and the Chicano community. Introduces basic concepts, principles, and perspectives related to a variety of community affairs affecting the Chicano. The community affairs analyzed include employment, education, law, and local government. The allocation of public resources and services in relation to proposed community needs will be reviewed in terms of the types of the social policy reflecting the dominant and/or Chicano Cultural values.

- **30a HISTORY OF MEXICO (3 units)**
  Three hours lecture.
  Prerequisite: None.
  A survey of the history of Mexico from Pre-Columbian times to the present. Includes an examination of Mexico's relations with the United States, with an emphasis on the influence of the United States constitution on Mexico's political history. Fulfills code requirements in U.S. Constitution, American History and Institutions. Not open to students with credit in HIST 30a.
- **30b HISTORY OF CHICANOS (3 units)**

  Three hours lecture.
  Prerequisite: None.
  A survey of the history of the Chicanos, with an emphasis on the development of the Southwest. The course reviews Pre-Columbian contributions to civilization, then examines in depth the conquest of the Aztecs by the Spanish, the settlement and development of the Southwest, the Mexican War of 1846-1848, the effects of the Mexican Revolution, the contributions of Mexicans/Chicanos to history, and issues affecting Chicanos today. Fulfills code requirements in California state and local governments. Not open to students with credit in HIST 30b.

- **31a LATIN AMERICAN AND MEXICAN LITERATURE (3 units)**

  Three hours lecture.
  Prerequisite: Eligibility for ENGL 1a.
  A survey course of the literature of Mexico and Latin America. The student will be introduced to the most representative works of Mexican and Latin American writers. Emphasizes works that best reflect the spirit of social and political change in Mexico, and the rest of Latin America. Not open to students with credit in ENGL 31a.

- **31b CHICANO LITERATURE (3 units)**

  Three hours lecture.
  Prerequisite: Eligibility for ENGL 1a.
  A bilingual (Spanish-English) analysis and criticism of Chicano literature in the United States. Introduces the student to the contemporary literature of the Chicano and its literary and content development. Emphasizes the Chicano novel, short story, essay, poetry and teatro. Not open to students with credit in ENGL 31b.

- **32a ART OF LATIN AMERICA (3 units)**

  Three hours lecture.
  Prerequisite: None.
  A survey of the arts, architecture, and artifacts produced in Latin America. Geographically it covers the regions of Mexico and Central and South America with emphasis on Mexico and the Central Andes. Studies will embrace pre-Columbian to modern times, with emphasis on pre-Columbian Indian empires. Not open to students with credit in ART 32a.

- **32b MEXICAN AND CHICANO ART (3 units)**

  Three hours lecture/discussion.
  Prerequisite: None.
  Deals with art history from 1521 to the present in Mexico and the United States. Emphasizes modern Mexican and Chicano artists who have worked in the 20th century. Explores panora of relationships between art, history, religion, philosophy, and respective art movements. Develops historical and cultural awareness in the students of the contributions to our society by the people of Mexican and Chicano heritage in both the United States and Mexico. Contemporary Chicano art styles will also be explored. Not open to students with credit in ART 32b.

- **34 MEXICAN AND CHICANO MUSIC (3 units)**

  Three hours lecture/discussion.
  Prerequisite: None, however, bilingualism is recommended.
  An historical survey of Mexican music from Pre-Columbian Culture to the present. Analysis of diverse styles of music in Mexico and in the Chicano community. Emphasis on the music of Mexico, composition of leading Mexican composers, aspects of indigenous and Mexican/Chicano folk music. Course may be offered either as a regular class or through Coordinated Instructional Systems, using broadcast media, with seminars and examinations by arrangement. Not open to students with credit in MUSIC 34.

- **35 MEXICAN PHILOSOPHY (3 units)**

  Three hours lecture/discussion.
  Prerequisite: None.
  A study of the background of Mexican philosophic thought as derived from Spanish and Indian sources and refined by Mexican writers. The influences of Spanish and Indian institutions on philosophic writers such as Samuel Ramos, Octavio Paz and Joe Vasconcellos are read and reported upon. The philosophy of Chicanismo is read and discussed. Not open to students with credit in PHIL 35.

- **36 SOCIOLOGY OF THE CHICANO (3 units)**

  Three hours lecture/discussion.
  Prerequisite: None.
  A survey course covering the socioeconomic characteristics of the Chicano community. The emerging cultural forces of the Chicano population are studied with an analysis of their educational status, immigration issues, barrio culture, politics, women, and socioeconomic features. A study of the inter-relationships of Chicano Cultural groups in labor, politics, and the barrio. Studies the developments of assimilation, minority status, Chicanismo, and cultural suppression as they relate to the Chicano experience. Not open to students with credit in SOC 36.

- **36L FIELDWORK IN CHICANO SOCIOLOGY (2 units)**

  Two hours lecture-seminar and four hours field work.
  Prerequisite: None.
  Provides students with field work experience in the Chicano community in a variety of settings such as tutoring, bilingual aides, high school liaison committees, and/or research projects. Students are allowed to design their own field work projects that relate to their respective interests, career goals, or community involvement. Conducted on the basis of "observing" the Chicano community in which field trips will be arranged and coordinated throughout the semester, also with weekly seminars. Not open to students with credit in SOC 36L.
• 38a—38b—38c TOPICS IN BILINGUAL EDUCATION (1—1—1 unit)

Three hours lecture/discussion for six weeks.
Prerequisite: None.
Develops historical and cultural awareness for teachers and aides of the contributions to our society by people of Mexican-American/Chicano heritage in both Mexico and the United States. Provides an opportunity to examine current and traditional children’s stories, fables, legends, and fairy tales. Introduces teachers and aides to the method of teaching reading in Spanish with sound-symbol relationship.

RELATED ETHNIC STUDIES COURSES

• ANTH 5c NORTH AMERICAN INDIANS (3 units)

Three hours lecture/discussion.
Prerequisite: None.
A descriptive study of Indian culture and societies in North America. Discussion of prehistoric, historic, and modern culture groups. Designed to provide an understanding and appreciation of the Indians of North America.

• ETH S 1 INTRODUCTION TO ETHNIC STUDIES (3 units)

Three hours lecture.
Prerequisite: None.
A cross-cultural course designed to expose students to the two major cultural groups of the United States and the Southwest. A survey of the role of Blacks and Chicanos in America from their beginnings in Africa and Pre-Columbian Mexico to the present.

ETH S 70a—70b MINORITY STUDENTS AND CULTURAL DIFFERENCES (0.5—0.5 unit)

Eight to twelve hours lecture per semester. Credit/No Credit.
Prerequisite: None.
The student will gain knowledge and understanding of behavioral patterns and social values of black and Chicano minority children and minority communities and also gain knowledge of the concepts, themes, and issues of ethnic minority cultures.

• HIST 36 HISTORY OF NATIVE AMERICANS (3 units)

Three hours lecture.
Prerequisite: None.
A study of the American Indian including a survey of origins, customs, and religion. The main emphasis will be on encounters with white expansion and United States governmental policies.

• MUSIC 40 MUSIC OF MINORITY CULTURES (2 units)

Two hours lecture.
Prerequisite: None.
An exploration of the origins, development, and current trends of ethnic music in the United States: primarily Black, Mexican-American, and American Indian.

• PSYCH 28 PSYCHOLOGY OF ETHNIC IDENTITY (3 units)

Three hours lecture.
Prerequisite: None.
Theoretical approach to the study of the psychological, cultural, and biological factors relating to ethnic differences in contemporary society. Investigation of racial and social class differences in economic opportunity, social mobility, attitude formation, and attitude changes. Also includes an examination of the sources of prejudice, intergroup relations, and the minority reaction to dominance.

• SOC 21 RACE AND POVERTY IN AMERICAN LIFE (3 units)

Three hours lecture.
Prerequisite: None.
An examination of race and poverty with special emphasis on the need for improved communication between the representatives of society, such as teachers, social workers, and police. The attitudes of professionals in these fields will be examined. Attempts to sensitize students toward seeking solutions to these problems. Although the course is concerned with urban and rural poverty generally, it will also examine local poverty in considerable detail. When appropriate, outside experts will lecture on their specialties.

• SPCH 31 PERSUASION IN A DEMOCRATIC SOCIETY (1.5—1.5—1.5—1.5 units)

Three hours lecture/discussion per week. Four nine-week sections as described below.
Prerequisite: Eligibility for SPCH 1.

• 31a FREEDOM OF EXPRESSION

One of a series of nine-week courses under the broad title of Persuasion in a Democratic Society. Designed to analyze and evaluate the constitutional guarantees of freedom of the press. Emphasizes mass communication in a contemporary society.

• 31b FREEDOM OF SPEECH

One of a series of nine-week courses under the broad title of Persuasion in a Democratic Society. Designed to analyze and evaluate the constitutional guarantees of freedom of speech. Emphasizes verbal communication in a contemporary society.

• 31c THE RHETORIC OF AGITATION

A critical analysis of the techniques of agitation and revolution with emphasis on the rhetoric of conflict in both formal and informal discourse; the values and dangers of agitation including its effect on decision making in a democratic society.

• 31d INTERRACIAL COMMUNICATION

Analysis of basic communication problems within a multi-racial society with emphasis on face-to-face interracial difficulties. Includes an involvement with cultural conflict and confrontation.
FAMILY AND CONSUMER EDUCATION
Child Development  
Clothing  
Cosmetology  
Family Studies  
Foods  
Hotel-Restaurant-Institutional Management  
Institutional Management  
Interior Design  
Nutrition  
Teacher Aide

The Family and Consumer Education Department offers students the opportunity to select one of several occupational careers that may prepare them to take their place in business or industry upon conclusion of their work in the major of their choice. The department also offers courses which provide lower division training for majors who expect to transfer to an upper division institution.

The student may develop a program of courses with the aid of the departmental counselor to meet his/her career needs. These courses may include a program of study leading to a specific career certificate goal, the Associate of Science degree, the Associate of Arts degree or lower division courses that lead to the Bachelor of Arts or Bachelor of Science degree in Home Economics or a related field.

CERTIFICATES OF ACHIEVEMENT

These training programs are designed for those who prefer career specialization courses and the earliest possible opportunity for job placement and/or the establishment of a self-operated small business. Students wishing greater in-depth preparation may continue toward more advanced courses, an associate degree or transfer to a four-year institution.

Programs offering these specialized certificates include: Clothing/Textiles, Cosmetology, Dietetic Assistant, Institutional Housekeeping, Interior Design, and School Food Service.

Each program consists of basic requirements or equivalents and suggested electives. The electives should be selected in consultation with departmental counseling and specialist staff.

Upon completion of the requirements, the student may apply for a Certificate of Achievement. Certificates are awarded subject to the approval of the lead instructor and the department chairperson.

CLOTHING/TEXTILES CERTIFICATE PROGRAM

The Clothing and Textiles Certificate Program prepares students to enter the expanding field of dressmaking and alterations.

Minimum units required – 30

Required Courses – 19 units

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<td>Fashion Sewing</td>
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<tr>
<td>CLTH 9b</td>
<td>Advanced Fashion Sewing</td>
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<tr>
<td>CLTH 13a</td>
<td>Today's Tailoring</td>
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<tr>
<td>CLTH 56</td>
<td>History of Clothing and Fabrics</td>
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Electives (Minimum of 11 units)

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<tr>
<td>CLTH 15</td>
<td>Patternmaking and Drafting</td>
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<tr>
<td>CLTH 22</td>
<td>Fashion Display</td>
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<tr>
<td>CLTH 54</td>
<td>Creative Dressmaking</td>
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</tr>
<tr>
<td>CLTH 55a</td>
<td>Occupational Needle Trades</td>
<td>2.0</td>
</tr>
</tbody>
</table>

COSMETOLOGY CERTIFICATE PROGRAM

Bakersfield College has contracted for specialized education in Cosmetology with local training facilities which are state approved and accredited. Trainees successfully completing 1,600 hours of training are qualified to take the State Board of Cosmetology examination to become licensed cosmetologists. Entry into training may occur at the beginning of the fall, spring or summer terms. At least 12 units of approved Bakersfield College courses must be completed prior to entry into the program unless the student's test scores indicate eligibility for transfer level English and mathematics, in which case the student may be automatically eligible for admission.

Prerequisites for Entry

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1</td>
<td>Approved Course*</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 1</td>
<td>Approved Course**</td>
<td>3.0</td>
</tr>
<tr>
<td>H ED 1</td>
<td>Principles of Health Education</td>
<td>2.0</td>
</tr>
<tr>
<td>BUS 58</td>
<td>Human Relations and Motivation</td>
<td>3.0</td>
</tr>
<tr>
<td>COS 76</td>
<td>Introduction to Cosmetology</td>
<td>1.0</td>
</tr>
</tbody>
</table>

*Students eligible for ENGL 1 or 1a may take a recommended course in lieu of English.
**Based on Math Placement Test.
Clothing 74A-d
" 24
" 22

HRIM 56(a) b Quality food/Emil Cul A 56A,b,c
DIETETIC ASSISTANT CERTIFICATE PROGRAM

The Dietetic Assistant Program is designed to provide upward mobility in the field of dietetics. Those students completing the certificate program will assist a Registered Dietitian, a Dietetic Technician, or an Administrator with a Registered Consultant Dietitian in assigned areas of supervision/food production in hospitals, nursing homes, extended care facilities, day care centers, schools and community health programs.

The Dietetic Assistant Program is approved by the Hospital, International and Educational Food Service Society. A Certificate of Achievement as a Dietetic Assistant is given to all students completing the certificate program. Upon completion of program, students are eligible for membership in the Hospital, International and Educational Food Service Society (HIEFSS).

Minimum units required — 31

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRIM 50a</td>
<td>Intro/Food Serv Ind</td>
<td>2.0</td>
</tr>
<tr>
<td>HRIM 51</td>
<td>Intro Food Prep</td>
<td>2.0</td>
</tr>
<tr>
<td>HRIM 52</td>
<td>Sanitation/Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>HRIM 53</td>
<td>Food Service Skills</td>
<td>2.0</td>
</tr>
<tr>
<td>HRIM 55</td>
<td>Dietetic Or/Fld Exp</td>
<td>2.0</td>
</tr>
<tr>
<td>HRIM 56b</td>
<td>Quantity Food/Cmrcl</td>
<td>3.0</td>
</tr>
</tbody>
</table>

INSTITUTIONAL HOUSEKEEPING CERTIFICATE PROGRAM

Upon completion of the Certificate Program, Bakersfield College will issue a Certificate of Achievement. Students completing the program who have had one year of experience in institutional housekeeping management at the administrative level may apply for certification through the National Executive Housekeepers Association, Inc.

Minimum units required — 29

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRIM 52</td>
<td>Sanitation/Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>INT D 15a</td>
<td>Elements/Prin Design</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC</td>
<td>Approved Course</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON</td>
<td>Approved Course</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 58</td>
<td>Human Relat/Motivat</td>
<td>3.0</td>
</tr>
<tr>
<td>I MGT 72a</td>
<td>Executive Housekpng</td>
<td>3.0</td>
</tr>
</tbody>
</table>

INTERIOR DESIGN CERTIFICATE PROGRAM

The curriculum is designed to prepare men and women for employment in interior design and related fields as well as enable them to create individual and beautiful environments for their own homes.

Minimum units required in related disciplines — 30

Required Courses — 21 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT D 1</td>
<td>Intr Inter/Arch Des</td>
<td>1.0</td>
</tr>
<tr>
<td>INT D 14</td>
<td>Art Tchnqs Prsnlatn</td>
<td>1.0</td>
</tr>
<tr>
<td>INT D 15a</td>
<td>Elements/Prin Design</td>
<td>3.0</td>
</tr>
<tr>
<td>INT D 15b</td>
<td>Adv Interior Design</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Restrictive Electives* (Minimum of 9 units)

*Nine units must be chosen from the Restrictive Electives listed below. Students may select all nine units from one area of emphasis or may select units from either of the three areas to total nine.

I. General Emphasis

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT D 16</td>
<td>Measuremnt/Calculat</td>
<td>2.0</td>
</tr>
<tr>
<td>INT D 74</td>
<td>Topic Inter Desn</td>
<td>1.0</td>
</tr>
<tr>
<td>ART 2ab</td>
<td>Basic Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 3ab</td>
<td>Basic Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 3ef</td>
<td>Fundamentals/Color</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 10</td>
<td>Freehand Drawing</td>
<td>2.0</td>
</tr>
</tbody>
</table>

II. Arch/Design Emphasis

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT D 25</td>
<td>Intr Space Planning</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 3ab</td>
<td>Basic Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 3cd</td>
<td>Dimensional Desgn</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 14cd</td>
<td>Graphic Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 30a</td>
<td>Industrial Drawing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

III. Retail Sales Emphasis

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT D 74</td>
<td>Accessories</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Other Suggested Courses (Not to be applied to 30 required units.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 51</td>
<td>Business Math (3)</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 52</td>
<td>Business Wild Today (3)</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 58</td>
<td>Human Relat/Motivat</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 74</td>
<td>Admin Mgt Small Bus (3)</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYCH 1a</td>
<td>General Psychology (3)</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD 1</td>
<td>Basic Wood Working (3)</td>
<td>3.0</td>
</tr>
<tr>
<td>SPCH 51</td>
<td>General Speech (3)</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCTG 53a</td>
<td>Intro Accounting 1 (3)</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCTG 53b</td>
<td>Intro Accounting 2 (3)</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Students wishing to earn the Associate Degree must also complete Graduation Requirements.
SCHOOL FOOD SERVICE CERTIFICATE PROGRAM

Minimum units required in related disciplines – 36

Upon completion of 36 units, Bakersfield College will issue a Certificate of Achievement in School Food Service. School Food Service Association issues certification as follows:

**Food Service Assistant I**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRIM 50a Intro/Food Serv Ind</td>
<td>2.0</td>
</tr>
<tr>
<td>HRIM 52 Sanitation/Safety</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**Food Service Assistant II**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRIM 51 Intro Food Prep</td>
<td>2.0</td>
</tr>
<tr>
<td>HRIM 53 Food Service Skills</td>
<td>2.0</td>
</tr>
<tr>
<td>HRIM 56a Quantity Foods</td>
<td>3.0</td>
</tr>
<tr>
<td>HRIM 56b Quantity Food/Cmrci 3.0</td>
<td></td>
</tr>
<tr>
<td>NUTR 10 Elem Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 58 Human Relat/Motivat</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Food Service Assistant III**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 58 Human Relat/Motivat</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 13a Child Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 41aL Pr Early Chldhd Lab</td>
<td>2.0</td>
</tr>
<tr>
<td>I MGT 57 Nutr Care/Schl Rcrd</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**School Food Service Manager I**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRIM 57 Purchasing</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 13a Child Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 33 Seminar Instl Mgt</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL Approved Course</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**School Food Service Manager II and III**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>I MGT 60 Financl Mgt/Control</td>
<td>3.0</td>
</tr>
<tr>
<td>I MGT 61 Organizational Mgt</td>
<td>3.0</td>
</tr>
<tr>
<td>I MGT 61L Fld Exp/Ognztl Mgt</td>
<td>1.0</td>
</tr>
<tr>
<td>I MGT 63 Seminar Instl Mgt</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Students already working in the food service industry who are unable to enroll full-time in the Hotel, Restaurant and Institutional Management Program may select from a wide variety of Institutional Management courses described in this catalog.

ASSOCIATE DEGREE PROGRAMS

Students may continue their training and education beyond the Certificate of Achievement by taking additional technical-related courses and general education courses which may lead to an Associate of Science or Associate of Arts degree.

Students must comply with the requirements as shown in the catalog under Graduation Requirements. Counselors/advisors will assist the student in planning for an Associate degree.

CHILD DEVELOPMENT AND FAMILY RELATIONS

This program is designed to train students to work with young children in a variety of early childhood settings. The two-year program primarily serves students desiring an early childhood background, supervised student teaching experience and fulfillment of academic requirements for a Regular Children’s Center Instructional Permit. It is strongly recommended that students in this program work closely with the departmental counselor/advisor.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH DV 13a Child Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 39 Infant Care/Dvlpmt</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 39L Int Care/Dvlpmt Lab</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 40a Creat Activ/Childrn</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 40b Mus Activ/Childrn</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 41a Prin Early Childhood</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 70 Topics Ch Dv/Fam S</td>
<td>4.0</td>
</tr>
<tr>
<td>CH DV 35a Admin Prgrms Chdrt</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 35b Lrng Disabled Child</td>
<td>1.0</td>
</tr>
<tr>
<td>CH DV 35c Dvlpmtl Dsabld Child</td>
<td>1.0</td>
</tr>
<tr>
<td>CH DV 35d Phys Handicapd</td>
<td>1.0</td>
</tr>
<tr>
<td>ENGL 35 Story Telling/Ch Lit</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Suggested Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOODS 20 Meals for Children</td>
<td>3.0</td>
</tr>
<tr>
<td>FAM S 31 Marriage</td>
<td>3.0</td>
</tr>
<tr>
<td>NUTR 10 Elem Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 43 Techniq Parent Educ</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 34 Prin/Prctce Spcl Ed</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 35c Dvlpmtl Dsabld Child</td>
<td>1.0</td>
</tr>
<tr>
<td>CH DV 35d Phys Handicapd</td>
<td>1.0</td>
</tr>
<tr>
<td>CH DV 35e Lrng Disabled Child</td>
<td>1.0</td>
</tr>
<tr>
<td>ENGL 35 Story Telling/Ch Lit</td>
<td>3.0</td>
</tr>
</tbody>
</table>

BAKERSFIELD COLLEGE COURSE OF STUDY

For Regular Children's Center Permit

Students must complete the following requirements to qualify for a Children's Center Permit. The permit is required to teach in children's centers and preschool programs that are wholly or partially financed by state or federal funds. The following requirements also fulfill the requirements for teachers in private nursery schools licensed by the State Department of Social Services.

**A. Children's Center Permit requirements:**

1. 24 units in approved Child Development courses.
2. 1 field study course (fulfilled by CH DV 41b and 41bL).
3. 100 days experience (See description in "C" below).
4. 16 units General Education Requirements (See "D" below).

**B. Required Courses - 10 units**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH DV 13a Child Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 41b Prin Early Childhood</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 42 Child/Family/Comnty 3.0</td>
<td></td>
</tr>
<tr>
<td>CH DV 41bL Pr Early Chldhd Lab</td>
<td>2.0</td>
</tr>
</tbody>
</table>
Electives (Minimum of 14 units)

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH DV 39</td>
<td>Infant Care/Devlpmt</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 39L</td>
<td>Infant Care/Devlpmt Lab</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 40a</td>
<td>Creat Activ/Childrn</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 40b</td>
<td>Mus Activ/Childrn</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 70</td>
<td>Topics Ch Dv/Fam S</td>
<td>4.0</td>
</tr>
<tr>
<td>CH DV 43</td>
<td>Techniq Parent Educ</td>
<td>2.0</td>
</tr>
<tr>
<td>FAM S 31</td>
<td>Marriage</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Special Education Emphasis

Students wishing to place an emphasis on Special Education should take the following courses as part of the 14 units required for Electives.

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH DV 34</td>
<td>Prin/Prctce Spcl Ed</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 35a</td>
<td>Dvlpmnt Dsabl Child</td>
<td>1.0</td>
</tr>
<tr>
<td>CH DV 35b</td>
<td>Emtonly Hndcpd Child</td>
<td>1.0</td>
</tr>
<tr>
<td>CH DV 35c</td>
<td>Dvlpmnt Dsabl Child</td>
<td>1.0</td>
</tr>
<tr>
<td>CH DV 35d</td>
<td>Phys Handicaped</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Other Suggested Courses

- NUTR 10 Elem Nutrition (3)
- ENGL 35 Story Telling/Ch Lit (3)

C. Lab Days Contributing to one-year experience requirement (100 days).

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH DV 41a</td>
<td>Prin Early Childhood</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 41L</td>
<td>Prin Early Chldhd Lab</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 33</td>
<td>Survey Special Educ</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 13b</td>
<td>Child Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 55a</td>
<td>Admin Pgrms Chldrn</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 55b</td>
<td>Admin Pgrms Chldrn</td>
<td>3.0</td>
</tr>
<tr>
<td>FOODS 20</td>
<td>Meals for Children</td>
<td>3.0</td>
</tr>
</tbody>
</table>

D. General Education Requirements - 16 units

Units must be taken in each of the following areas: English, Math/Science, History and Humanities.

NOTE: Students wishing to earn the Associate Degree must also complete the courses listed under Graduation Requirements in this catalog. The State requires attaining of the AA degree or the passing of a proficiency test for the Children’s Center Permit.

HOTEL, RESTAURANT AND INSTITUTIONAL MANAGEMENT

The Hotel, Restaurant and Institutional Management program includes the Dietetic Assistant Certificate Program, the Dietetic Technician Associate of Arts Degree Program and the Restaurant Management Associate of Arts Degree Program.

The program is designed to prepare students for employment in the hotel, restaurant and/or health care professions. The program consists of a combination of lecture and laboratory experiences in a variety of settings.

DIETETIC TECHNICIAN PROGRAM

Food Service Management Emphasis

The Dietetic Technician Program prepares students to enter the expanding field of dietetics. Those students completing the program are qualified to function as Dietetic Technicians in hospitals, nursing homes, and extended care facilities under the direction of a Registered Dietitian or an Administrator with a Registered Consultant Dietitian, in the assessment, planning, implementation and evaluation of the food service operation. Dietetic Technicians are also employed in day care centers, schools, community health programs and other food service operations.

The Dietetic Technician Program is approved by the American Dietetic Association. A Certificate of Achievement as a Dietetic Technician is given to all students completing the Associate Degree program. Graduates are eligible for American Dietetic Association Technician membership and membership in the Hospital, Institution and Educational Food Service Society (HIEFSS).

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRIM 50a</td>
<td>Intro/Food Serv Ind</td>
<td>2.0</td>
</tr>
<tr>
<td>HRIM 50b</td>
<td>History of Food</td>
<td>2.0</td>
</tr>
<tr>
<td>HRIM 51</td>
<td>Intro Food Prep</td>
<td>2.0</td>
</tr>
<tr>
<td>HRIM 52</td>
<td>Sanitation/Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>HRIM 53</td>
<td>Food Service Skills</td>
<td>2.0</td>
</tr>
<tr>
<td>HRIM 54</td>
<td>Dining Room Service</td>
<td>3.0</td>
</tr>
<tr>
<td>HRIM 55</td>
<td>Dietetic Or/Fld Exp</td>
<td>2.0</td>
</tr>
</tbody>
</table>

RESTAURANT MANAGEMENT PROGRAM

The Restaurant Management Program prepares students for employment in restaurant, catering, hotel, and industrial food service operations. Those students completing the program are qualified for the many available positions having production, sales and service, and mid-management responsibilities.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRIM 50a</td>
<td>Intro/Food Serv Ind</td>
<td>2.0</td>
</tr>
<tr>
<td>HRIM 50b</td>
<td>History of Food</td>
<td>2.0</td>
</tr>
<tr>
<td>HRIM 51</td>
<td>Intro Food Prep</td>
<td>2.0</td>
</tr>
<tr>
<td>HRIM 52</td>
<td>Sanitation/Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>HRIM 53</td>
<td>Food Service Skills</td>
<td>2.0</td>
</tr>
<tr>
<td>HRIM 54</td>
<td>Dining Room Service</td>
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</tr>
<tr>
<td>HRIM 56a</td>
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</tbody>
</table>

HOTEL, RESTAURANT AND INSTITUTIONAL MANAGEMENT

The Hotel, Restaurant and Institutional Management program includes the Dietetic Assistant Certificate Program, the Dietetic Technician Associate of Arts Degree Program and the Restaurant Management Associate of Arts Degree Program.

The program is designed to prepare students for employment in the hotel, restaurant and/or health care professions. The program consists of a combination of lecture and laboratory experiences in a variety of settings.

DIETETIC TECHNICIAN PROGRAM

Food Service Management Emphasis

The Dietetic Technician Program prepares students to enter the expanding field of dietetics. Those students completing the program are qualified to function as Dietetic Technicians in hospitals, nursing homes, and extended care facilities under the direction of a Registered Dietitian or an Administrator with a Registered Consultant Dietitian, in the assessment, planning, implementation and evaluation of the food service operation. Dietetic Technicians are also employed in day care centers, schools, community health programs and other food service operations.

The Dietetic Technician Program is approved by the American Dietetic Association. A Certificate of Achievement as a Dietetic Technician is given to all students completing the Associate Degree program. Graduates are eligible for American Dietetic Association Technician membership and membership in the Hospital, Institution and Educational Food Service Society (HIEFSS).

Required Courses

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<td>HRIM 52</td>
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<tr>
<td>HRIM 55</td>
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</tr>
</tbody>
</table>

RESTAURANT MANAGEMENT PROGRAM

The Restaurant Management Program prepares students for employment in restaurant, catering, hotel, and industrial food service operations. Those students completing the program are qualified for the many available positions having production, sales and service, and mid-management responsibilities.

Required Courses

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</table>
ASSOCIATE OF SCIENCE DEGREE PROGRAM

FAMILY AND CONSUMER STUDIES

The associate degree curriculum in family and consumer studies is planned for the person seeking practical training in planning and establishing a home or for the person wishing to begin professional preparation to become a home economist in a variety of fields, such as teaching, dietetics and nutrition, food service director, interior designing, writing and advertising, experimentation in textiles and foods, fashion merchandising, extension service, and consumer affairs.

Minimum units required in related discipline - 32

Required Courses

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<tr>
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<td>FOODS 10b</td>
<td>3.0</td>
<td>Art of Cooking</td>
<td></td>
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SUGGESTED TRANSFER PROGRAMS

Since requirements vary, the current catalog of the chosen college or university should be consulted for specific requirements of the chosen field.

These suggested programs will meet most of the lower division requirements at California State Universities/Colleges as well as fulfilling all the requirements for the associate degree from Bakersfield College.

CHILD DEVELOPMENT

Child Development majors are planned to provide for professional careers in teaching, business, and human service areas.

Required Courses

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</table>

HOME ECONOMICS

Designed for students planning for professional careers in teaching and business. The degree is the Bachelor of Science with a major in Home Economics.

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HOTEL, RESTAURANT, INSTITUTIONAL MANAGEMENT PROGRAM

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INTERIOR DESIGN

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COURSE DESCRIPTIONS

CHILD DEVELOPMENT
(CH DV)

• 10 CHILD GROWTH AND DEVELOPMENT (3 units)

Three hours lecture.
Prerequisite: None.
Developmental characteristics during infancy, toddlerhood, preschool, middle years, and adolescence with emphasis at each stage of physical and motor development, perceptual cognitive language development, emotional-social development, including self-concept and personality development.

• 13a CHILD GROWTH AND DEVELOPMENT (3 units)

Three hours lecture and one hour laboratory in the Child Study Center.
Prerequisite: Reading Level B or higher.
Studies the child from prenatal life through adolescence with major emphasis on the years between two and five.

• 13b CHILD DEVELOPMENT (3 units)

Three hours lecture and one hour observation.
Prerequisite: CH DV 13a.
Studies the child from middle childhood through adolescence.

• 33 SURVEY OF SPECIAL EDUCATION (3 units)

Three hours lecture.
Prerequisite: CH DV 13a or equivalent.
A survey of the field of special education emphasizing the role of the special education assistant in the training of the exceptional child. Includes an introduction to the types of handicapped children, the function of the assistant as a teacher assistant, and the vocational opportunities available. Field trips to educational facilities will be an important part of the instructional program. Not open to students with credit in SP ED 33.

• 34 PRINCIPLES AND PRACTICES IN SPECIAL EDUCATION (3 units)

Two hours lecture and four hours laboratory.
Prerequisite: CH DV 33 or SP ED 33.
An opportunity is provided for the student to observe and participate as an assistant with trainable mentally retarded, educable mentally retarded, physically and orthopedic handicapped and educational handicapped programs at public and private schools and mental institutions. Not open to students with credit in SP ED 34.

• 35a UNDERSTANDING THE EMOTIONALLY HANDICAPPED CHILD (1 unit)

Two hours lecture for nine weeks.
Prerequisite: None.
Understanding of emotional disturbance in children concentrating on the preschool-age and the early grade school-age child. Study of the utilization of appropriate methods of intervention for those emotionally disturbed children, both preschool-age and early grade school-age. Not open to students with credit in SP ED 35a.

• 35b UNDERSTANDING THE LEARNING DISABLED CHILD (1 unit)

Two hours lecture for nine weeks.
Prerequisite: None.
Types of learning disabilities of children will be recognized. Students will learn remedial techniques used with students having learning disabilities. Not open to students with credit in SP ED 35b.

• 35c UNDERSTANDING THE DEVELOPMENTALLY DISABLED CHILD (1 unit)

Two hours lecture for nine weeks.
Prerequisite: None.
Presents the history of mental retardation and defines mental retardation in relation to child development. Studies teaching techniques for levels of retarded children. Not open to students with credit in SP ED 35c.
• **35d UNDERSTANDING THE PHYSICALLY HANDICAPPED CHILD** (1 unit)
  
  Two hours lecture for nine weeks.
  Prerequisite: None.
  Studies physical handicaps of children and the characteristics of those handicaps. Explains mainstreaming and those responsibilities of teacher, parent, and specialist. Not open to students with credit in SP ED 35d.

• **35e WORKING WITH AUTISTIC CHILDREN** (1 unit)
  
  Two hours lecture for nine weeks.
  Prerequisite: None.
  Practical application of behavior modification techniques. Not open to students with credit in SP ED 35e.

• **39 INFANT/TODDLER CARE AND DEVELOPMENT** (2 units)
  
  Two hours lecture.
  Prerequisite: None.
  A review of infant development: physical, emotional, social and intellectual. Principles of infant care, including nutrition and health practices and curriculum.

• **39L INFANT/TODDLER CARE AND DEVELOPMENT FIELD EXPERIENCE** (2 units)
  
  Four hours laboratory and one hour discussion.
  Prerequisite: None. CH DV 39 should be taken concurrently.
  Field experience in an infant/toddler center carrying out the knowledge gained in CH DV 39. Discussion with the instructor of experiences with the infants and toddlers in the child study center.

• **40a CREATIVE ACTIVITIES FOR CHILDREN** (2 units)
  
  Two hours lecture, demonstration and laboratory.
  Prerequisite: None.
  Materials and techniques in teaching arts and crafts to young children. Developing creativity will be emphasized. This course meets CDA option, competency No. 7.

• **40b MUSIC ACTIVITIES FOR CHILDREN** (2 units)
  
  Two hours lecture/demonstration.
  Prerequisite: None.
  A presentation of music, teaching techniques and materials appropriate to the growth and development of young children. This course meets CDA option, competency No. 7.

• **40c MOVEMENT ACTIVITIES FOR CHILDREN** (2 units)
  
  Two hours lecture.
  Prerequisite: None.
  Movement activities designed to develop gross and fine motor movement and increase self confidence for preschool children. This course meets CDA option, competency No. 4.

• **41a PRINCIPLES AND PRACTICES IN EARLY CHILDHOOD** (2 units)
  
  Two hours lecture.
  Prerequisite: CH DV 13a with at least a “C” grade. CH DV 41aL should be taken concurrently. It is strongly suggested that at least one of the CH DV 40 series be completed before taking CH DV 41a.
  Development of insight into and understanding of the theories and practices used in early childhood programs.

• **41aL LABORATORY FOR PRINCIPLES AND PRACTICES IN EARLY CHILDHOOD** (2 units)
  
  Six hours laboratory.
  Prerequisite: CH DV 13a with at least a “C” grade. CH DV 41aL should be taken concurrently.
  Supervised laboratory experience in observing and working with children two to five years of age in the Child Study Centers.

• **41b PRINCIPLES AND PRACTICES IN EARLY CHILDHOOD** (2 units)
  
  Two hours lecture.
  Prerequisite: CH DV 41a with a grade of “C” or higher.
  This course is designed to teach an understanding of the nursery school program. It will include planning of learning experiences and teaching materials appropriate to the physical, mental, social and emotional growth of the young child.

• **41bL LABORATORY FOR PRINCIPLES AND PRACTICES IN EARLY CHILDHOOD** (2 units)
  
  Six hours laboratory.
  Prerequisite: CH DV 41aL. CH DV 41b should be taken concurrently.
  Designed to teach an understanding of the preschool program. It will include participating, planning and implementing teaching techniques in a preschool lab situation.

• **41c PRINCIPLES AND PRACTICES IN EXTENDED DAY PROGRAMS** (4 units)
  
  Field Study. Two hours lecture and eight hours laboratory.
  Prerequisite: CH DV 13b.
  Early childhood programs for children 5 through 13. Designed to give students experience with children above the preschool level. Strongly recommended for those seeking employment in early childhood or extended day programs.
<table>
<thead>
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<th>Course Title</th>
<th>Credit(s)</th>
<th>Hours</th>
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<td>Ch Dv 70B</td>
<td>PRESCH CURR/PARENTS</td>
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<td>Ch Dv 70C</td>
<td>USE/PUPPETS CLASSRM</td>
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<td>Ch Dv 70D</td>
<td>DISCPLN TECHNIQUES</td>
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<td>Ch Dv 70E</td>
<td>CH DV STU/PARENTS/INF</td>
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<td>Ch Dv 70G</td>
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<td>SNACKS/LUNCH CHLDREN</td>
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• 42 CHILD, FAMILY AND THE COMMUNITY (3 units)

Three hours lecture.
Prerequisite: CH DV 13a.
Patterns of family living in a democratic society; their implications for people entrusted with the care and education of children and for the community. Emphasis is placed on understanding the processes of socialization. This course meets CDA option, competency No. 11.

• 43 TECHNIQUES OF PARENT EDUCATION (2 units)

Three hours lecture for twelve weeks.
Prerequisite: None.
The materials and techniques necessary for a viable parent education program, combined with evaluation and discussion of sample parent meetings. Techniques for conducting home visits, group discussions, individual conferences will be discussed. The goal of the program will be to move the parent from parent education toward the skills and confidence necessary to be a parent volunteer in the classroom.

50a LIVING WITH THE ADOLESCENT (2 units)

Two hours lecture.
Prerequisite: None.
Problems of living with the adolescent with particular emphasis on problems of foster children.

51 WORKSHOPS IN CHILD DEVELOPMENT (1 unit)

Two hours lecture, discussion for twelve weeks.
Prerequisite: None.
Studies the child from prenatal life through adolescence with the major emphasis on practical problems of living with children and adolescents.

55a ADMINISTRATION OF PROGRAMS FOR YOUNG CHILDREN (3 units)

Three hours lecture.
Prerequisite: CH DV 13a, CH DV 41a, CH DV 41b is strongly recommended.
Administration of programs for young children including day care centers, private nursery schools and publicly supported programs.

55b ADMINISTRATION OF PROGRAMS FOR YOUNG CHILDREN (3 units)

Three hours lecture.
Prerequisite: CH DV 13a, CH DV 41a, CH DV 41b is strongly recommended.
Administration of programs for young children including day care centers, private nursery schools and publicly supported programs.

70 TOPICS IN CHILD DEVELOPMENT AND FAMILY STUDIES (0.5 - 1 unit. Limit of 8 units.)

Minimum of eight hours per 0.5 unit.
Prerequisite: None.
Selected topics in child development, emphasizing specialized teaching materials and techniques.

91 MANAGEMENT OF CHILD DAY CARE HOMES (0 unit)

Eight two-hour sessions.
Prerequisite: None.
Principles of good management and operation of Day Care Homes for children.

99
• 14 PATTERNS FITTING/ALTERATIONS (3 units)

Six hours lecture/demonstration and laboratory.
Prerequisite: CLTH 9a, 9b or equivalent.
Basic principles of pattern construction and pattern alteration based on engineering principles.

• 15 PATTERNS MAKING/PATTERN DRAFTING (3 units)

Six hours lecture/demonstration and laboratory.
Prerequisite: CLTH 9a, 51a, or test skill in clothing construction or evaluation by instructor.
Basic principles of pattern construction; individual standards in garment construction techniques; selection of fabric, color and design; fitting problems and their solutions; self-expression in dress design. Open to men and women.

• 23 APPAREL SELECTION (0.5 unit)

Two hours lecture for four weeks.
Prerequisite: None.
Techniques of apparel selection and grooming to be used by individuals in the business world or who plan to enter the working field.

51a BEGINNING SEWING (1 unit)

One hour lecture and two hours laboratory.
Prerequisite: None.
A presentation of the fundamental sewing techniques.

51b INTERMEDIATE SEWING (1 unit)

One hour lecture and two hours laboratory.
Prerequisite: CLTH 9a or 50 or 51a or equivalent.
Dressmaking techniques for the intermediate or advanced student. (Formerly CLTH 52a.)

• 54 CREATIVE DRESSMAKING (3 units)

Two hours lecture and three hours laboratory.
Prerequisite: CLTH 9a or equivalent.
Each meeting will consist of lecture and when appropriate demonstration regarding the analysis and construction of a professionally made garment. Remaining time will be spent working on projects and question/answer periods.

55a OCCUPATIONAL NEEDLETRADES (2 units)

Three hours lecture and laboratory.
Prerequisite: None.
Basic techniques of historical and contemporary stitchery and applique. Individual projects emphasizing creative design and color for clothing and interiors.

55b OCCUPATIONAL NEEDLETRADES (2 units)

Three hours demonstration/laboratory.
Prerequisite: CLTH 55a recommended, but not required.
Emphasis on quilts and quilting, as well as crewel stitchery, and other forms of needlework. Individual projects allow students to broaden concepts of basic techniques.

56 HISTORY OF CLOTHING AND COSTUME (2 units)

Two hours lecture.
Prerequisite: None.
A survey of historic costume, textiles, embellishment and ornament with relation to social, economic, and political forces.

COSMETOLOGY (COSMT)

50ab BASIC COSMETOLOGY (14 units)

Five hours lecture and twenty-seven hours minimum laboratory per week.
Prerequisite: Admission to Cosmetology Program.
Basic scientific theory as it applies to cosmetology, anatomy, disorders and diseases of the skin, scalp and hair; physiology of skin, hair and nails; chemistry and electricity, salon management, bacteriology and sterilization. Composition and application of shampoos; finger-waving and shaping; curl construction, including pin curling and sculpture curling; cold waving, including composition and reaction to materials used; color rinses and vegetable tints; manicuring; and basic hair cutting. 50a (7 units—16 hours)—50b (7 units—16 hours) equivalent to 50ab.

50cd INTERMEDIATE COSMETOLOGY (14 units)

Five hours lecture and twenty-seven hours minimum laboratory per week.
Prerequisite: Completion of COSMT 50ab with a minimum grade of “C.”
Hairstyling and introductory contest work; introduction to salon clinic, permanent hair coloring, massage and scalp treatments, intermediate permanent waving, hair shaping, hair straightening. Shaping and styling of wigs, and care of hair pieces. Training and experience in receptionist duties. 50c (7 units—16 hours)—50d (7 units—16 hours) equivalent to 50cd.

50ef ADVANCED COSMETOLOGY (14 units)

Five hours lecture and twenty-seven hours minimum laboratory per week.
Prerequisite: Completion of COSMT 50ab—50cd with at least a “C” grade.
Senior hair styling, contest work, experience in the salon clinic in shampooing, hair shaping, manicuring, permanent waving, hair coloring, facial, scalp treatments. Salesmanship practice, advanced theory and 127 hours State Board preparatory testing practice. 50e (7 units—16 hours)—50f (7 units—16 hours) equivalent to 50ef.
<table>
<thead>
<tr>
<th>Cul A 70I</th>
<th>Culinary Arts</th>
<th>Cul Hearts Kitchen</th>
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<td>Wine Types</td>
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<td>Basic Food Prep</td>
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<tr>
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<td>Beg Baking/Pastry</td>
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<tr>
<td>Cul A 70D</td>
<td>Beg Cake Decorating</td>
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<td>1 unit</td>
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<tr>
<td>Cul A 70E</td>
<td>Cooking With Wine</td>
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<tr>
<td>Cul A 70H</td>
<td>Advanced Buffet</td>
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<td>1 unit</td>
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76 INTRODUCTION TO COSMETOLOGY (1 unit)

Two hours lecture for nine weeks.
Prerequisite: None.
Understanding of the field of cosmetology, the job opportunities in the field, the skills and need for competency in the field, and policies and procedures of the Bakersfield College Cosmetology Program. (Not open to students with credit in COUNS 76.)

FAMILY STUDIES
(FAM S)

• 11 FAMILY PORTRAIT: A STUDY OF CONTEMPORARY LIFE STYLES
(3 units)

Three hours lecture via TV.
Prerequisite: None.
A study of marriage and the family and contemporary life styles in our society, with emphasis on both the physical and emotional health of the individual and the couple.

• 31 MARRIAGE (3 units)

Three hours lecture.
Prerequisite: None.
A functional approach to the problems of marriage; the nature and purpose of family life; special emphasis on the problems of modern courtship, mate selection and the adjustment problems associated with the early years of marriage. Not open to students with credit in PSYCH 31.

60 RESIDENTIAL CARE FOR SENIORS TRAINING (1 unit)

Two hours lecture for ten weeks.
Prerequisite: None.
Instructs residential home operators and administrators how to provide care and services for individuals sixty-two years or older.

66a TRAINING FOR RESIDENTIAL CARE HOME SPECIALISTS (3 units)

Three hours lecture.
Prerequisite: None.
Designed to train residential care home specialists serving persons with special developmental needs. Topics included are general patterns of human development, understanding mental retardation, autism, epilepsy and cerebral palsy, skill development, social and emotional development and fostering of independent living skills.

66b TRAINING FOR RESIDENTIAL CARE HOME SPECIALISTS (3 units)

Three hours lecture.
Prerequisite: None.
Designed to train residential care home specialists serving persons with special developmental needs. Topics included are licensing regulations and procedures, health and safety factors, record keeping, community resources, behavior management, medical techniques, counseling techniques and vocational training.

66c TEACHING THE DEVELOPMENTALLY DISABLED: PROGRAM PLANNING AND IMPLEMENTATION (3 units)

Three hours lecture/discussion.
Prerequisite: None.
The student will be able to assess the learning needs of clients with developmental disabilities and to implement and evaluate an individualized client program plan based on the assessed needs and abilities of the client as demonstrated in the completion of an Individual Program Plan.

70 TOPICS IN FAMILY STUDIES (0.5—2 units. Limit 8 units.)

Minimum of eight hours per half unit.
Prerequisite: None.
Current information on selected areas of Family Studies such as parenting, marriage, family crises.

90 PARENT/CONSUMER EDUCATION (0 units)

Three hours lecture/demonstration.
Prerequisite: None.
Designed to help parents develop a philosophy of parenthood and to become better consumers.

FOODS

• 10a ELEMENTARY FOODS (4 units)

Three hours lecture and three hours laboratory.
Prerequisite: None.
A course in food preparation with emphasis on basic principles with laboratory applications. The course covers cooking terminology, use of equipment; basic preparation methods of fruits, vegetables, salads, jams and jellies, meat, poultry, fish, dairy products, quick breads, yeast breads, pastry; sugar cookery and deep fat frying.

• 10b ART OF COOKING (3 units)

Two hours lecture and three hours laboratory.
Prerequisite: FOODS 10a is recommended.
Cooking for the family, special occasions and specific age groups to meet nutritional needs. Consumer buying as related to mixes and prepared foods.

• 12 MEALS FOR THE MODERN FAMILY (3 units)

Three hours lecture.
Prerequisite: None.
An introduction to foods used by the modern family including shopping for nutrition and economical preparation.
### 16 MEAL PLANNING (2 units)

One hour lecture and three hours laboratory.
Prerequisite: None. Open to both men and women.
Nutritional social aspects of planning, marketing, preparing and serving complete meals for families. Emphasizes management of time, money and energy as well as proper use of equipment and table appointments.

### 20 MEALS FOR CHILDREN (3 units)

Two hours lecture and three hours laboratory.
Prerequisite: None.
Planning meals for children from infancy through adolescence with particular emphasis on meal planning for group programs such as nursery schools, day care centers and schools. This course meets CDA option, competency No. 2.

#### 72a LOW CALORIE MEALS (1 unit)

One hour lecture and two hours laboratory for nine weeks.
Prerequisite: None.
Planning creative and appetizing meals for those who must restrict caloric intake. Included will be family meals that can be adapted for family members with different calorie requirements and party menus for special occasions.

#### 72c LOW BUDGET MEALS (1 unit)

One hour lecture and two hours laboratory for nine weeks.
Prerequisite: None.
Planning meals to get the most for the food dollar. Emphasis on evaluating the cost of different foods and choosing ones that best fit the budget.

#### 73a FOODS OF THE WESTERN HEMISPHERE (0.5 unit. Limit 4 units.)

Three hours lecture/demonstration per week for four weeks.
Prerequisite: None.
Study of the foods of the countries of the Western World. Each four week session will cover different countries including: Mediterranean, European, Scandinavian, Pacific Islands, North America, Latin American, Eastern Europe. Emphasis will be on native foods, food preparation equipment and techniques, meal plans, preparation of characteristic dishes, adaptation to American tastes, availability of necessary ingredients and utensils locally.

#### 73b FOODS OF THE EASTERN HEMISPHERE (0.5 unit. Limit 4 units.)

Three hours lecture/demonstration per week for four weeks.
Prerequisite: None.
Study of the foods of the countries of the Eastern World. Each four week session will cover different countries including: Oriental, African, Asiatic, Arabic, Eastern Mediterranean, Southeast Asia. Emphasis will be on native foods, food preparation equipment and techniques, meal plans, preparation of characteristic dishes, adaptation to American tastes, availability of necessary ingredients and utensils locally.

### 50a INTRODUCTION TO THE FOOD SERVICE INDUSTRY (2 units)

Two hours lecture.
Prerequisite: None.
A survey of the scope, organization and responsibilities of typical food service operations. Job positions at all levels are discussed, including education and experience requirements, personal qualifications emphasizing importance of good attitude and positive self-image, job responsibilities, and job advancement opportunities. Field trips are scheduled to representative food service operations. (Formerly I MGT 50.)

### 50b HISTORY OF FOOD (2 units)

Two hours lecture.
Prerequisite: None.
A study of the history of food with emphasis on the development of the food service industry from early civilization to modern periods. Covers historic menus, the background and traditions associated with particular food items and French menu terms.

### 51 INTRODUCTORY FOOD PREPARATION (2 units)

One hour lecture and two hours laboratory/demonstration.
Prerequisite: None.
An introduction to an understanding of the elementary principles of food preparation, emphasizing basic scientific concepts related to the preparation of food. (Formerly part of I MGT 51.)

### 52 SANITATION AND SAFETY (2 units)

Two hours lecture.
Prerequisite: None.
Acquaints students with the basic principles of sanitation and safety standards set by regulatory agencies and management for food service personnel, equipment, and facilities with application of these principles to food service operations. (Formerly I MGT 53.)

### 53 FOOD SERVICE SKILLS (2 units)

One hour lecture and two hours laboratory/demonstration.
Prerequisite: None.
Designed to develop foundation skills and attitudes essential for job function in the food service industry, emphasizes equipment selection, use and maintenance; recipe interpretation and adjustment; portion control measures; work simplification and organization procedures; culinary vocabulary; ingredient identification; emergency procedures; food service etiquette and professional attitude; and time management. (Formerly part of I MGT 51.)
54 DINING ROOM SERVICE (3 units)

Two hours lecture and three hours laboratory.
Prerequisite: None.
Designed to train student in basic dining room procedure with emphasis on total hospitality approach to good customer relations and profit. (Formerly I MGT 62.)

55 DIETETIC ORIENTATION-FIELD EXPERIENCE (2 units)

One hour lecture and four hours supervised field experience.
Prerequisite: Completion of or concurrent enrollment in NUTR 10.
Designed to provide supervised opportunity for student to be introduced to scope and responsibilities of dietetic team members in health care, community feeding programs and schools. (Formerly I MGT 56a.)

56a QUANTITY FOODS (3 units)

One hour lecture and six hours laboratory.
Prerequisites: HRIM 51, 52 and 53.
Provides for the application of quantity cookery principles to various food group classifications (i.e., stocks, soups, meats, vegetables, salads, breakfast items, and bakery items), food presentation techniques, and development of basic culinary skills and procedures which can be adapted and applied to any cooking situation. Professional attitudes and competence of performance are stressed. (Formerly part of I MGT 52.)

56b QUANTITY FOOD PRODUCTION—COMMERCIAL (3 units)

One hour lecture and six hours laboratory.
Prerequisite: Completion of or concurrent enrollment in HRIM 56a.
Provides for the study and application of food production planning for commercial operations that ensures quality and cost of food you want to serve. Production planning is analyzed for all food processing steps from purchasing to service. Professionalism and development of individual's food production planning style are stressed. (Formerly part of I MGT 52.)

56c QUANTITY FOOD PRODUCTION—DIETETIC (3 units)

One hour lecture, one hour seminar and five hours supervised field experience.
Prerequisite: Completion of or concurrent enrollment in HRIM 56a.
Provides for the study and application of food production planning for community health care operations that ensures quality and cost of food you want to serve. Production planning is analyzed for all food processing steps from purchasing to service. Professionalism and development of individual's food production planning style are stressed. (Formerly part of I MGT 52.)
66c ADVANCED COOKING AND SERVICE (14 units)
Ten hours lecture and thirty hours laboratory per week.
Prerequisites: HRIM 66a and 66b or equivalent.
Produces all the cooking and service for the Renegade Room dinner service and baking for the cafeteria.

66cd ADVANCED COOKING AND SERVICE (14 units)
Ten hours lecture, eight hours field experience and twenty-two hours laboratory.
Prerequisites: HRIM 66ad and 66bd or equivalent.
Designed for the Dietetic Program and produces all the cooking and service for the Renegade Room dinner service and baking for the cafeteria.

66d MANAGEMENT FOR HOTEL/RESTAURANT/INSTITUTIONAL MANAGEMENT MAJORS (14 units)
Ten hours lecture and thirty hours laboratory.
Prerequisites: HRIM 66a, 66b and 66c or equivalent.
Encompasses the responsibilities of managing all college and hotel/restaurant/institutional management food services. Putting together and using the knowledge the students have gained in three semesters, they now practice their skills.

66dd MANAGEMENT FOR HOTEL/RESTAURANT/INSTITUTIONAL MANAGEMENT MAJORS (14 units)
Ten hours lecture, eight hours field experience and twenty-two hours laboratory.
Prerequisite: HRIM 66ad, 66bd and 66cd or equivalent.
Designed for the Dietetic Program and encompasses the responsibilities of managing all college and hotel/restaurant/institutional management food services. Putting together and using the knowledge the students have gained in three semesters, they now practice their skills.

68a FOOD SERVICE CATERING (1 unit)
One hour lecture and two hours laboratory for nine weeks.
Prerequisite: None.
A basic course in catering techniques. Provides students information on how to plan a menu for catered events, on basic concepts and techniques for booking catered events and on appropriate production and service techniques.

65 INSTITUTIONAL MANAGEMENT (1 MGT)

54 FOOD PRODUCTION MANAGEMENT (3 units)
One hour lecture and six hours laboratory.
Prerequisites: I MGT 51, 52, and 53.
Includes quantity food preparation with emphasis on food production management, effective management of time and equipment, and the responsibilities of the production supervisor.

55 SUPERVISION AND TRAINING TECHNIQUES (3 units)
Three hours lecture.
Prerequisite: None.
Procedures and problems met by food service operations in developing personnel programs and desirable labor management relationships. Includes the responsibility of selection, placement, orientation, training, counseling, rating and promotion of employees.

56 NUTRITION CARE—FOOD PRODUCTION MANAGEMENT (2 units)
One hour lecture and five hours supervised field experience.
Prerequisite: Concurrent enrollment in I MGT 54.
Emphasizes the importance of an understanding of food production management techniques and the need for planning for it in health care facilities.

57 NUTRITION CARE—SCHOOL RECORDS (3 units)
One hour lecture and ten hours supervised field experience.
Prerequisites: I MGT 50 and 52.
Includes the specifics on record keeping for a school food service program with an emphasis on the needs and requirements of the Federal Type A Lunch.

58 MENU PLANNING (1 unit)
One hour lecture.
Prerequisite: None.
The planning of satisfying and interesting meals for institutional and commercial food service operations, considering such factors as nutritional adequacy, psychological needs, economic consideration, types of operations, available equipment, and skill of personnel.

59 HEALTH CARE DELIVERY SYSTEMS (2 units)
Two hours lecture.
Prerequisite: NUTR 10.
Discussion of food and nutrition relating to community health and nutrition education and services provided by community organizations.

60 FINANCIAL MANAGEMENT AND CONTROL (3 units)
Three hours lecture.
Prerequisite: None.
Managerial concepts of accounting and cost control applied to the food service industry in order to assume responsibility for planning and control decisions. Includes terms, report forms, financial statements, budgets and operating statements.
61 ORGANIZATIONAL MANAGEMENT (3 units)
Three hours lecture.
Prerequisite: I MGT 55.
The systematic development of concepts and techniques of management and its application to the organization and management of schools, health care and community care food service operations. The coordination of organizational resources to achieve operational goals.

61L ORGANIZATIONAL MANAGEMENT (1 unit)
Five hours supervised field experience.
Prerequisite: I MGT 55, 61 (may be taken concurrently).
Course description same as I MGT 61.

63 SEMINAR IN INSTITUTIONAL MANAGEMENT (1 unit)
One hour lecture.
Prerequisites: NUTR 10 and I MGT 61.
The understanding of the role of technician as a professional, includes awareness of new technological advances, procurement of nutrition resource materials and provisions of nutrition education programs.

63L SEMINAR IN INSTITUTIONAL MANAGEMENT (1 unit)
Five hours supervised field experience.
Prerequisites: NUTR 10, I MGT 61, 63 (may be taken concurrently).
Course description same as I MGT 63.

64 MERCHANDISING AND SALES (3 units)
Three hours lecture.
Prerequisite: None.
Principles of sales promotion for commercial, industrial or private food service operations. Covers sales promotion, advertising, market analysis and public relations as they relate to the hospitality industry.

65 ORIENTATION TO FOOD SERVICE SKILLS — THYME FOR CHILDREN (2 units)
One and a half hours lecture and one and a half hours laboratory.
Prerequisite: None.
A basic course in food preparation skills. The course covers selection of food and supplies for work stations, record keeping, selection of food to satisfy the re-imburseable child care food patterns, proper use of kitchen equipment and use of sanitary methods in food preparation.

70 TOPICS IN INSTITUTIONAL MANAGEMENT (0.5—2 units)
One hour lecture and two hours laboratory for eight weeks. (Minimum of eight hours per half unit.)
Prerequisite: None.
Current information on selected areas of Institutional Management such as work simplification, preparing school meals, food purchasing, and management principles.

71a NUTRITION: THE YOUNG CHILD (0.5 unit)
Three, three hour lectures.
Prerequisite: None.
The student will be able to identify the basic principles of nutrition relating to the young child. Nutrients supplied by the Child Care Food Program meal patterns and minimum food amounts for children of different ages will be emphasized.

71b MENU PLANNING: CHILD CARE FOOD PROGRAM (0.5 unit)
Three, three hour lectures.
Prerequisite: None.
The student will apply basic menu planning principles in writing a week's menu for breakfast, lunch and snack following the Child Care Food Program re-imburseable meal pattern guidelines.

72a EXECUTIVE HOUSEKEEPING (3 units)
Three hours lecture and six hours by arrangement.
Prerequisite: None.
The organization and management of housekeeping functions in the hospital, hotel, motel, motor inn or club including keeping records, purchasing and budgets.

72b EXECUTIVE HOUSEKEEPING (3 units)
Three hours lecture and six hours by arrangement.
Prerequisite: None.
Basic tools and cleaning techniques required in institutional housekeeping. Techniques and measurement devices for housekeeping management. Safety practices, human and non-human factors, fire prevention, emergencies, securities.

265 QUANTITY COOKING FOR RESTAURANTS AND INSTITUTIONS (2—8 units)
Open Enrollment — Registration Monday throughout school year. Students may contract to attend from a minimum of four hours per day to a maximum of eight hours per day from two to five days per week.
Prerequisite: None.
Designed to train men and women for employment in food preparation positions in restaurants and institutions. Completion of course is based on attaining required competencies for job placement.
270 TOPICS IN INSTITUTIONAL MANAGEMENT (0.5—2 units)
Self-paced, open entry/open exit. For description see I MGT 70.

280 CULINARY ARTS PROGRAM (14 units)
Forty hours per week for sixteen weeks, open entry/open exit.
Prerequisite: None.
Course consists of basic concepts and techniques for interior design presentations. The application of art principles in visual communication will include the survey and exploration of various media and the organization of portfolios, graphs, charts, posters and display boards.

285 WAITER/WAITRESS TRAINING (7 units)
Forty hours lecture/laboratory, open entry/open exit.
Prerequisite: None.
The student will be able to identify and apply the elements and principles of design in the food service industry in general.

INTERIOR DESIGN
(INT D)

1 INTRODUCTION TO INTERIOR AND ARCHITECTURAL DESIGN (1 unit)
One hour lecture.
Prerequisite: None.
Overview of the field of Interior Design and how it relates to architecture and other environmental design fields; employment opportunities and educational programs available. Covers some material included in ARCH 1.

10 DESIGNING HOME INTERIORS (3 units)
Three hours lecture.
Prerequisite: None.
Three hours lecture.
Prerequisite: None.
An introductory study of the basic principles of interior design. It is specifically created for both men and women of all ages and locales. This telecourse emphasizes the planning of residential interiors that will satisfy individual and family needs, values and life styles. Consumer education regarding the selection of home furnishing materials is also stressed.

12 CAREERS IN INTERIOR DESIGN (1 unit)
Two hours lecture per week for nine weeks.
Prerequisite: None.
The student will survey the fields of interior design, decoration and related occupations, to obtain a knowledge of types of careers, job opportunities, education and training, professional organizations, including areas of local concern.

14 ART TECHNIQUES FOR PRESENTATION (1 unit)
Two hours a week for nine weeks.
Prerequisites: None. Concurrent enrollment in INT D 15a, ART 2a, 3a recommended for Interior Design majors.
The course consists of basic concepts and techniques for interior design presentations. The application of art principles in visual communication will include the survey and exploration of various media and the organization of portfolios, graphs, charts, posters and display boards.

15a ELEMENTS AND PRINCIPLES OF DESIGN (3 units)
Three hours lecture.
Prerequisite: None. Recommended INT D 14, and ART 3a be taken concurrently for majors.
The student will be able to identify and apply the elements and principles of design in homes of varying life styles. Emphasis will be on organized selection and arrangement for beauty comfort and care adapted to use.

15b ADVANCED INTERIOR DESIGN (3 units)
Three hours lecture.
Prerequisite: INT D 15a.
The student will participate in individual and group projects to create interiors relating site, architecture, floor plans, color and furnishings. This will include a comparison of materials, construction, calculations, and processes for selection and installation in the business field of interior design. Field trips are required.

16 MEASUREMENTS AND CALCULATIONS (2 units)
Two hours lecture.
Prerequisite: None.
Student will develop the ability to accurately measure and calculate materials needed and costs involved in the various treatments for walls, windows, floors, furniture, bedding, and other soft goods. Student shall also become aware of installation methods and problems.

21a INTERIOR DRAWING (1.5 units)
One hour lecture and two hours laboratory.
Prerequisite: None.
The drafting of floor design, interior elevations, and sections for use with craftsmen and presentation to the client. (Formerly INT D 21.)

21b INTERIOR DRAWING (1.5 units)
One hour lecture and two hours laboratory.
Prerequisite: INT D 21a.
Basic drawing and rendering techniques for presenting interiors to design clientele. (Formerly INT D 21.)
• 22 HOUSING AND ENVIRONMENTAL DESIGN (3 units)

Three hours lecture.
Prerequisite: None.
The student will develop an environmental and socio-economic approach to total home design. This will include factors relating to physical site, landscape architects, style, houseplans, furniture arrangement, construction and costs.

• 23a FURNITURE STYLES (2 units)

Two hours lecture.
Prerequisite: INT D 15a or ART 3ab recommended.
A study of styles of architecture and furnishings from antiquity through the Middle Ages, Italian Renaissance, Hispanic, French and English Periods to reveal the development of design and adaptation to contemporary use.

• 23b FURNITURE STYLES (2 units)

Two hours lecture.
Prerequisite: INT D 23a recommended.
A study of furniture decor and architectural style in Early American, Victorian, Oriental, Modern, and Contemporary design.

• 24 FABRICS FOR INTERIOR DESIGNERS (3 units)

Three hours lecture.
Prerequisite: None.
Student will understand the characteristics of fibers, yarns, fabric construction, dyes, and finishes. Emphasis will be on design, serviceability, and care related to interior design needs. Spring 1982 course required four hours lecture/laboratory.

• 25 INTRODUCTION TO SPACE PLANNING (3 units)

Three hours lecture.
Prerequisites: INT D 15b, 21ab and ARCH 10ab (or equivalent).
The student will receive an introduction to fundamentals of space planning. Emphasis will be on recognition of project objectives, analysis of project information, and formation and execution of floor plans prepared from data gathered.

• 10 ELEMENTARY NUTRITION (3 units)

Three hours lecture.
Prerequisite: None.
Principles of nutrition and their application to diets under normal conditions. May be offered for two units in Summer Session.

• 11 MODIFIED DIETS (3 units)

Three hours lecture.
Prerequisite: NUTR 10.
This course is for the student to apply adequate nutritional needs to special and abnormal conditions.

• 12 CURRENT ISSUES IN CHILD NUTRITION PROGRAMS (3 units)

Three hours lecture.
Prerequisite: None.
Role and responsibilities of unit school food service managers, child care administrators or family day care sponsors in providing meals to children and youth which comply with legislative and budgetary parameters and which meet their nutritional, social, psychological and ethnic needs; and the role of participants in integrating the food service program with classroom nutrition education activities.

• 14 NUTRITION AND FITNESS (3 units)

Two hours lecture and two hours laboratory.
Prerequisite: None.
The student will be able to successfully lose weight using the proper techniques of nutrition and exercise. The proper way of eating, planning, and preparing meals for weight control will be covered in order for students to lose and maintain weight. Individual exercise programs will be developed for every student. (Not open to students with credit in WN ST 14.)

70 TOPICS IN NUTRITION (0.5 unit. Limit 8 units.)

One hour lecture and two hours laboratory.
Minimum of eight hours per half unit.
Prerequisite: None.
TEACHER AIDE PROGRAM (TCH A)

70 CURRENT PRACTICES (0.5—2 units)
Eight hours minimum per half unit.
Prerequisite: None.
Provides information and study related to current practices, student needs and recent developments within the field.

77b MATHEMATICS LIFE EXPERIENCE (3 units)
Three hours lecture.
Prerequisite: None.
The teacher aide will better understand that the Math Life Experience curriculum is designed to tempt teenage students into learning more about mathematics, while seeming to teach it less. Not open to students with credit in MATH 77b.

77c TEACHING THE LAUBACH LITERACY PROGRAM (3 units)
Three hours lecture.
Prerequisite: None.
Covers problems of learning the English language with emphasis on the sound system of English. Presents the Laubach Literacy method and materials, supplementary vocabulary lists and drills, teaching aids, and materials for review and reinforcement. Develops skills in writing high-interest literacy instruction. Introduces language problems of the exceptional student and the Laubach method of basic language skills instruction. Not open to students with credit in RDNG 77c.

77d ADVANCED LAUBACH LITERACY PROGRAM (3 units)
Three hours lecture.
Prerequisite: TCH A 77c.
A continuation of TCH A 77c, advanced study of the Laubach Literacy Program.

77e CAREER TRAINING SKILLS (3 units)
Three hours lecture.
Prerequisite: None.
Career Training Skills is a one semester, basic vocational course designed to acquaint teacher aides with the fundamental operations of career training. The primary purpose is to help teacher aides understand the role they play in career education.

FOREIGN LANGUAGES
Filipino
French
German
Latin
Spanish

General breadth requirements for a liberal arts program should be followed.

GERMAN

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 1ab Elemen</td>
<td>5.0</td>
</tr>
<tr>
<td>GERM 2ab Elemen</td>
<td>5.0</td>
</tr>
<tr>
<td>GERM 3 Intermed</td>
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Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>HIST 4ab Euopean</td>
<td>6.0</td>
</tr>
<tr>
<td>MUSIC 22ac</td>
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</table>

SPANISH

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
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<tr>
<td>HIST 8ab Americas</td>
<td>6.0</td>
</tr>
<tr>
<td>HIST 30a History</td>
<td>3.0</td>
</tr>
</tbody>
</table>

FIRE TECHNOLOGY
See Public Service

FOODS
See Family and Consumer Education
COURSE DESCRIPTIONS

FILIPINO

52a—52b ELEMENTARY CONVERSATIONAL FILIPINO (2—2 units)

Three hours per week.
Prerequisite: FILIP 52a or evaluation by instructor prerequisite to 52b.
Designed for those who wish to develop a basic understanding of conversational Filipino. Emphasizes pronunciation, correct usage and common idiomatic speech.

52c—52d INTERMEDIATE CONVERSATIONAL FILIPINO (2—2 units)

Three hours per week.
Prerequisite: FILIP 52b prerequisite to 52c; 52c or evaluation by instructor prerequisite to 52d.
Designed for those who wish to develop a basic understanding of conversational Filipino. Emphasizes pronunciation, correct usage and common idiomatic speech.

FRENCH

1ab ELEMENTARY FRENCH (5 units)

1a—1b (2.5—2.5) equivalent to 1ab.
Five hours per week.
Prerequisite: None.
An introduction to the basic vocabulary and structures of the French language. A study of the breadth of the French-speaking world, and contemporary French life. Emphasis on communicative competency; individualization of instruction according to student interests; and small group instruction. Use of the language laboratory and the Library Learning Center.

2ab ELEMENTARY FRENCH (5 units)

2a—2b (2.5—2.5) equivalent to 2ab.
Five hours per week.
Prerequisite: FREN 1ab or two years of high school French.
Continuation and consolidation of the skills initiated in FREN 1ab including the basic vocabulary and structures of the French language. Continued study of the French speaking world, and contemporary French life. Continued emphasis on communicative competency.

GERMAN

1ab ELEMENTARY GERMAN (5 units)

1a—1b (2.5—2.5) equivalent to 1ab.
Five hours per week.
Prerequisite: None.
Presentation of the fundamentals of German construction necessary for accurate speaking, reading, writing and understanding German. Daily drill in pronunciation, structure and comprehension of the language. Practice in the language laboratory.

2ab ELEMENTARY GERMAN (5 units)

2a—2b (2.5—2.5) equivalent to 2ab.
Five hours per week.
Prerequisite: GERM 1, or two years of high school German.
Continuation of GERM 1 with additional emphasis on conversational style. Practice in the language laboratory.

3 INTERMEDIATE GERMAN (4 units)

Four hours per week.
Prerequisite: GERM 2ab or three years of high school German.
Selected readings in German with study of German cultural background. Review of essentials of grammar with more advanced structure and vocabulary. Use of audiovisual materials for improvement of comprehension. Practice in the language laboratory.

4 INTERMEDIATE GERMAN (4 units)

Four hours per week.
Prerequisite: GERM 3 or four years of high school German.
Continued readings in German from selected works of German authors. Study of cultural development of Germany and its historical background. More advanced experience in vocabulary development, comprehension, speaking and writing German. Some specialized reading in student's major field.

5a—5b ORAL GERMAN (3—3 units)

Three hours per week.
Prerequisite: GERM 3 or equivalent. (May be taken concurrently with GERM 4). 5a is not prerequisite to 5b.
Intensive practice in advanced audio-lingual drills and exercises designed to improve pronunciation and intonation and to develop fluency. Study of selected materials from everyday dialogues, prose readings, poetic and dramatic interpretations. Structural review and composition as necessary to perfect style.
NOTE: Students may enroll in Conversational German a maximum of four times regardless of level.

52a—52b ELEMENTARY CONVERSATIONAL GERMAN
(52a: 2—2 units; 52b: 2—2 units)
Three hours per week.
Prerequisite: GERM 52a or its equivalent prerequisite to GERM 52b.
Designed for those who wish to develop a basic understanding of conversational German. Emphasizes pronunciation, correct usage and common idiomatic speech.

52c ELEMENTARY CONVERSATIONAL GERMAN (2—2 units)
Three hours per week.
Prerequisite: GERM 52b or GERM 1 or at least two years of recent high school German.
Designed to present continuity in studying conversational German. More extensive practice in conversation through the use of films and recordings which reveal present-day German culture and customs. Designed for those who wish to improve their present speaking knowledge of German.

LATIN

• 1 ELEMENTARY LATIN (3 units)
Three hours per week.
Prerequisite: None.
An introduction to basic vocabulary and grammatical forms for reading simple Latin phrases. (Offered only occasionally.)

• 2 ELEMENTARY LATIN (3 units)
Three hours per week.
Prerequisite: LATIN 1 or two years of high school Latin.
A continuation of course 1; emphasizes reading and interpreting works of noted Roman authors. (Offered only occasionally.)

SPANISH (SPAN)

• 1ab ELEMENTARY SPANISH (5 units)
1a—1b (2.5—2.5) equivalent to 1ab.
Five hours per week.
Prerequisite: Span 1a or one year of high school Spanish prerequisite to Span 1b.
Emphasizes conversation and improves exercises in reading and writing as well as constant oral drill in class and language laboratory. Gives the opportunity to acquire an active use of the language on an elementary level.

• 2ab ELEMENTARY SPANISH (5 units)
2a—2b (2.5—2.5) equivalent to 2ab.
Five hours per week.
Prerequisite: SPAN 1ab, or two years of high school Spanish.
Continuation of SPAN 1ab. Emphasizes comprehension and correct oral delivery of basic and more advanced language patterns. Advanced exercises in reading and writing as well as constant oral drill in class and language laboratory.

• 3 INTERMEDIATE SPANISH (4 units)
Four hours per week.
Prerequisite: SPAN 2ab or three years of high school Spanish.
Readings in Spanish and Latin-American literature aimed toward developing competence in the language and an understanding of the spirit and culture of Spanish-speaking peoples. Practice in oral and written expression with a systematic review of grammar and practice in the language laboratory.

• 4 INTERMEDIATE SPANISH (4 units)
Four hours per week.
Prerequisite: SPAN 3 or four years of high school Spanish.
Continuation of SPAN 3. Advanced readings in Spanish and Latin-American literature aimed toward increased competence in the language and a greater understanding of the spirit and culture of Spain and Latin-America. Practice in oral and written expression with a review of grammar and practice in the language laboratory.

• 5a—5b ADVANCED SPANISH (3—3 units)
Three hours per week.
Prerequisite: Four years of high school Spanish, or SPAN 3 with a grade of "A" or "B" or SPAN 4. May be taken concurrently with SPAN 4.
Extensive readings in Spanish and Latin-American literature and further development of conversational ability. Written and oral reports.

NOTE: Students may enroll in Conversational Spanish a maximum of four times regardless of level.

52a—52b ELEMENTARY CONVERSATIONAL SPANISH
(52a: 2—2 units; 52b: 2—2 units)
Three hours per week.
Prerequisite: 52a or equivalent prerequisite to 52b.
Designed for those who wish to develop a basic understanding of conversational Spanish. Emphasizes pronunciation, correct usage and common idiomatic speech.
52c—52d INTERMEDIATE CONVERSATIONAL SPANISH
(52c: 2—2 units; 52d: 2—2 units)
Three hours per week.
Prerequisites: SPAN 52b prerequisite to 52c; 52c or evaluation by instructor pre­
requisite to 52d.
Designed to present continuity in the study of conversational Spanish. Advanced
practice in conversation, usage and grammar.

54 SPANISH FOR HEALTH CAREERS (2 units)
Three hours lecture/drill.
Prerequisite: None.
The student will develop speaking, listening and reading skills in Spanish appropriate
for carrying on simple exchanges in medical/health settings. Emphasis will be on oral
drill and practice in simulated employee-patient situations. Not open to students with
credit in H CRS 54.

56a SPANISH FOR SECRETARIES AND RECEPTIONISTS (3 units)
Three hours lecture/drill.
Prerequisite: None.
The student will develop basic conversational skills necessary for general receptionist
work and writing skills useful for writing letters and memos. Not open to students with
credit in BUS 57a.
70 TOPICS IN SPANISH (1—2 units. Limit 8 units.)
Minimum of eighteen hours lecture/discussion per unit.
Prerequisite: One year of college Spanish or two years of high school Spanish or the
ability to read newspapers or magazines in Spanish with the help of a dictionary.
Concentrates on current events derived from current sources written in Latin America
and Spain. May be taken four times only.

GENERAL STUDIES
(GN ST)

• 10 INDEPENDENT READING PROGRAM (1—2 units)
One-two hour class meeting and coordinated instruction system. Time by arrange­
ment.
Prerequisite: None.
A program designed for the student interested in independent reading of books in the
social sciences, physical sciences and humanities under library staff supervision.

• 15 OCEANS: OUR CONTINUING FRONTIER (3 units)
One hour newspaper lecture and two hours by arrangement.
Prerequisite: None.
Presented to students via 16 articles written by eminent scholars and published in the
local newspaper. Examines the whole range of human involvement with the sea.
Shows through literature and painting how man's perception of the sea has changed,
and how through exploration at sea, scientists have changed man's understanding of
the history of the earth.

GEOGRAPHY
See Physical Science

GEOLoGY
See Physical Science

GERMAN
See Foreign Languages

FORESTRY
See Agriculture

FRENCH
See Foreign Languages
HEALTH CAREERS
Dental Assisting
Emergency Medical Technician
Health Careers
Medical Science
Mobile Intensive Care - Paramedic
Primary Care Associate
Radiologic Technology
Registered Nursing
Vocational Nursing

ADMISSIONS TO HEALTH CAREER PROGRAMS

I. Statement of philosophy concerning admission into Health Career Programs:

All persons who are able to perform satisfactorily the responsibilities and tasks required in an education and training program and in subsequent employment in the field should have an opportunity to succeed. It is recognized that the need to protect the safety and welfare of the student and the community is a primary consideration in the health occupations.

II. Admission Procedures

A. Determination of eligibility for admission:

The student must meet educational and health requirements established for the program.

1. Educational Requirements
   a. A high school diploma or equivalent is required for all health career programs.
   b. Meet specific program prerequisites.

2. Health Requirements

   The student must be free from communicable diseases, infection, psychological disorders, and other conditions that would prevent the successful performance of the responsibilities and tasks required in the education and training program of the college. Any condition described above which is developed by the student after admission to the program may be considered sufficient cause for suspension from the program. If possible, such a student should be counseled to enter a more appropriate program.

   a. Physical Examinations — This exam is to be completed AFTER the student receives notification of selection into the program. The applicant must have acceptable emotional and physical health as determined by a physician.

   b. Immunizations — As needed for acceptance in a clinical and training facility, and to protect the health and welfare of the student and community.

3. Eligibility for Admission

   Applicants who have completed their applications, have their high school and college transcripts on file, and have met the educational and health requirements will be designated as eligible for admission. Information regarding criteria for selection may be obtained in the Health Career’s Office.

DENTAL ASSISTING

A Dental Assistant provides service in chairside procedures, preventative dentistry, dental radiography, and general office procedures. The one-year program at Bakersfield College makes possible the practical application of techniques in a classroom setting which is designed and equipped to simulate a modern dental office and laboratory.

You are best suited to this career if your assets include neatness, good manual dexterity, patience, a wish to be helpful and good judgement.

Upon successful completion of the Dental Assisting program, graduates are eligible to take the National Certification Examination for Dental Assistants, and the California State Registered Dental Assistant Examination for Licensure. Graduates of the program are well-prepared to function in a professional manner in local dental offices.

Students are selected for the Dental Assisting Program once a year. Classes begin each Summer (mid-July).

Prerequisites for the program:
   1. High school graduate, or GED equivalent.
   2. English 1 eligibility.
   3. Typing skills— at least 30 wpm.
   4. MATH 60 or equivalent.
   5. Proof of adequate health status is required for final acceptance.

SUMMER (4 Weeks)  UN

| DNT A 50 | Intro Dental Asstng | 3.0 |

First Semester  UN  Second Semester  UN

| DNT A 51 | Mtrl/Proced/Instrum | 3.0 | DNT A 53 | Bio Dental Sciences | 3.0 |
| DNT A 52 | Dent Anat Terminology | 3.0 | DNT A 55 | Dent Office Proced | 3.0 |
| DNT A 58a | Operator Technique | 3.0 | DNT A 58b | Operator Technique | 3.0 |
| DNT A 60a | Dental Radiography | 3.0 | DNT A 60b | Dental Radiography | 2.0 |
| DNT A 65a | Int Chairside Asstg | 3.0 | DNT A 65b | Adv Chair/Offic Asst | 6.0 |

TOTAL  15.0  TOTAL  17.0
EMERGENCY MEDICAL TECHNOLOGY PROGRAMS

EMERGENCY MEDICAL TECHNICIAN 1

This is a 104-hour certificate program (12 week course) which will prepare the student to perform basic emergency care as part of the mobile emergency care team. EMT 1 certification is required by the State in order to function in emergency patient care.

A class of 40-45 students begins each semester. At the end of the course those students who successfully pass the final examination (75% or higher) will be certified by the Kern County Health Department for a two-year period. Re-certification every two years is required to maintain EMT 1 status.

MOBILE INTENSIVE CARE PARAMEDIC

This is a two semester certificate program beyond EMT 1 level training. The purpose of this program is to provide advanced emergency care skills which can be utilized in the field to stabilize medical and trauma emergencies. A class of 20-25 students begins the didactic phase each year.

Upon successful completion of the MICP program, the graduate will be eligible for certification by the County Health Officer. Re-certification is required every two years by taking MICP continuing education classes.

Prerequisites:
1. EMT 1 certificate or equivalent
2. HL SC 1 (Anatomy/Physiology) with a grade of “C” or higher
3. MED S 60a (Medical Terminology) with a grade of “C” or higher
4. Employment in emergency service (6 months) is strongly recommended

Course sequence:
1. MICP 2a (Paramedic Techniques, Pharmacology, basic ECG) (8 units)
2. MICP 2b (Hosp Clinical Exper) (4 units)
3. MICP 2c (MIC Field Experien) (4 units)

PRIMARY CARE ASSOCIATE
(PHYSICIAN’S ASSISTANT)

This is a two-year program which is run as a satellite program for Stanford Medical Center. A class of 5 students begins the first year of the program each Fall. Applications may be obtained from the Health Careers Department from November 1 through February 1.

The purpose of the program is to train individuals who will function in association with physicians in the maintenance and delivery of primary health care to medically underserved areas. The first year of the program is devoted to pre-clinical course work at Bakersfield College while the second year is spent in clinical instruction and practice.

Emphasis during the second year is placed on those skills necessary for the comprehensive assessment of the patient’s needs. Specifically, these include skills in history-taking, physical examination, basic laboratory techniques, minor diagnostic and therapeutic procedures, and patient counselling and education.

Prerequisites:
1. High school graduate or equivalent (GED).
2. High school or college sciences (Biology/Chemistry).
3. One or more years of experience in the health care delivery system is required.

In order to progress into the second year of the program, a student must have successfully completed the first year’s courses and must have received an Associate degree. The student must also have a preceptor site established in order to complete the clinical experiences necessary for the program. Although the first year of the P.C.A. program is on the Bakersfield College campus, the student should know that the first three months of the second year will be at Stanford. This will be at the student’s expense.

Upon successful completion of the P.C.A. program, the graduates will sit for a national board examination (A.M.A.) in order to be certified as a Physician’s Assistant (P.A.).

FIRST YEAR – BAKERSFIELD

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
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<tbody>
<tr>
<td>ANAT 1 Human Anatomy 4.0</td>
<td>PHYSL 1 Intro Physiology 5.0</td>
</tr>
<tr>
<td>MATH A Elementary Algebra 3.0</td>
<td>BACT 2 Bacterial-Microbiol 4.0</td>
</tr>
<tr>
<td>ENGL 1a Expository Composit 3.0</td>
<td>SPCH 1, 2, 3 or 4 3.0</td>
</tr>
<tr>
<td>PSYCH 1a General Psychology 3.0</td>
<td>PHIL 12 Ethics Living/Dying 3.0</td>
</tr>
<tr>
<td>PCA 50 Primary Care Assoc 2.0</td>
<td>ETH S 2.0</td>
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<td>HIST 3.0</td>
<td>TOTAL 17.0</td>
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<tr>
<td>TOTAL 18.0</td>
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SUMMER SESSION

| HIST 3.0 |
| SOC 1 Intro Sociology 3.0 |
| TOTAL 6.0 |
SECOND YEAR — STANFORD/BAKERSFIELD

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th>Winter Quarter</th>
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<tbody>
<tr>
<td>CLINICAL ASSESSMENT 60</td>
<td>MEDICINE 61b 3.0</td>
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<tr>
<td>COMMUNICATIONS &amp; COUN</td>
<td>OBSTET/GYNECOLOGY 65 3.0</td>
</tr>
<tr>
<td>MEDICINE 61a</td>
<td>SURGERY 68 2.0</td>
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<tr>
<td>PSYCHIATRY 67</td>
<td>PRECEPTORSHIP 90a 8.0</td>
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<tr>
<td>PEDIATRICS 66</td>
<td>TOTAL 16.0</td>
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<thead>
<tr>
<th>Spring Quarter</th>
<th>Summer Quarter</th>
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</thead>
<tbody>
<tr>
<td>PRECEPTORSHIP 90b 13.0</td>
<td>PRECEPTORSHIP 90c 13.0</td>
</tr>
<tr>
<td>TOTAL 13.0</td>
<td>TOTAL 13.0</td>
</tr>
</tbody>
</table>

RADIOLOGIC TECHNOLOGY

Radiologic Technology is a health care profession whose practitioners work in hospitals, clinics, and private offices. The Radiologic Technologist (Radiographer) is a member of the allied health team who works directly with the patient and the physician performing a wide variety of diagnostic procedures.

The Bakersfield College program admits students every other year (1982, 1984, etc.). Once a student has completed the required prerequisite courses for admission, the R.T. Program is 24 months in length. The program provides intensive didactic and clinical training in the theory and skills appropriate for the examination of the American Registry of Radiologic Technologists and the California Licensure Examination for Radiologic Technologists. In order to complete the R.T. Program and graduate with an Associate Degree, the student must have taken a minimum of 15 units of general education courses. These courses should be taken prior to entrance into the program.

Lectures and supervised clinical experiences are presented concurrently. Students must earn a “C” or higher in all R.T. Program classes, required general education courses and have met all clinical requirements and objectives to be recommended for the examinations by the American Registry of Radiologic Technologists (ARRT) and the State of California, Department of Health Services-Certification. A Certificate of Completion is awarded upon successful completion of the program.

Prerequisites:

1. High school graduate or equivalent education. (GPA-2.5).
2. MATH D with a grade of “C” or higher.
3. High school chemistry (taken within last two years) or general college chemistry with a grade of “C” or higher.
4. ENGL 1a eligibility.
5. Personal interview with the selection committee.

Additional Information

A physical examination will be required after acceptance into the program to demonstrate the level of physical and emotional health necessary to meet the objectives of the program.

Summer I (6 weeks)

| RAD T 1 | Intr Radiologic Tec 2.0 |
| MED S 50 | Handling of Patients 2.0 |
| MED S 60a | Medical Terminology 3.0 |
| TOTAL 7.0 |

Fall I (First Semester) Spring I (Second Semester)

| RAD T 2a | Rad Anat/Position 1 3.0 |
| RAD T 3a | Radiographic Prin 1 3.0 |
| RAD T 4 | Clinic Education 1 5.0 |
| HL SC 1 | Anatomy/Physiology 4.0 |
| RAD T 6 | Clinic Education 2 5.0 |
| TOTAL 15.0-18.0 |

Summer II (9 weeks)

| RAD T 7 | Radiolog Sum Clinic 6.0 |

Fall II (Third Semester) Spring II (Fourth Semester)

| RAD T 2c | Rad Anat/Position 3 3.0 |
| RAD T 8 | Nuclear Med/Rd Ther 3.0 |
| RAD T 9 | Intr Spcl Procedures 1.0 |
| RAD T 10 | Clinic Education 4 8.0 |
| *General Education 3-6.0 |
| TOTAL 12.0-17.0 |

Summer III (5 weeks)

| RAD T 14 | Clinic Education 6 3.0 |

*Required General Education Courses: ENGL 1a, Approved Social Science, PHIL 12, PSYCH 1a, SPCH 1, 2, or 4.
Nursing education prepares the graduate to provide services to those who need health care. As needs are varied, so are educational programs, which may proceed from the simpler to the more complex in accordance with the career ladder concept. The progression reads: nursing assistant, licensed vocational nurse, registered nurse, and other nurses with Bachelor of Science, Master of Science and Doctorate in Nursing. The role a graduate holds may be that of staff member, supervisor, administrator, clinical specialist, educator, or researcher.

Philosophy

The Bakersfield College Associate Degree Nursing Program presents nursing as an art and science based upon holistic knowledge of man.

Nursing education is a continuous process of change which enables the individual to achieve upward and lateral mobility. It recognizes that the individual student has attitudes, values, beliefs, and needs which have evolved from individual differences and cultural backgrounds.

Nursing is a process, and in utilizing this process, nurses interact with individuals to help them achieve and maintain an optimum level of wellness throughout the life span. The role of the practitioner is rapidly changing as nursing emerges as a profession concerned with the consumer in a variety of settings and situations. Recognition of the need to protect the safety and welfare of the student and the consumer is a primary consideration in nursing education.

A combination of nursing courses with general education courses promotes stimulation for cultural, intellectual, technical, and social growth. The interdisciplinary environment of the college campus promotes individuality, creativity, and an awareness of, and appreciation for these characteristics in others.

Admission to the Associate Degree Program

Classes are selected each Fall and Spring semesters from applicants who have met the required prerequisites. Applications must be submitted between March 1 and April 15 for the Fall semester and between October 1 and November 15 for Spring semester.

Nursing Program Admission Requirements

Required courses must be passed with a “C” grade or higher prior to admission to the Program.

1. One year of high school Algebra OR MATH A/200A at Bakersfield College
2. Graduation from high school or equivalent education.
3. Eligibility for ENGL 1a as demonstrated by qualifying scores on the Bakersfield College assessment tests
4. CHEM 11 or 2a or 1a at Bakersfield College or an equivalent course at another college. Students who plan to transfer to a B.S. Program are advised to take CHEM 1a.
5. ANAT 1 (HL SC 1, taken before Summer 1984, will be accepted in lieu of ANAT 1).

Additional courses which may be taken prior to Admission to the Nursing Program and which must be completed with a “C” grade or higher for the ADN Program:

1. Written and Oral Communication Requirements (See Graduation Requirements).
2. SOC 1.
3. PSYCH 1a.
4. Social Science requirement (See Graduation Requirements).
5. PHIL 12, Medical-Ethical problems of living and dying.

Additional Information

A physical examination will be required after acceptance into the program to demonstrate the level of physical and emotional health necessary to meet the objectives of the program.

ASSOCIATE DEGREE NURSE PROGRAM

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
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<tbody>
<tr>
<td>NURS 1 The Arts Sci of Nsg 5.0</td>
<td>NURS 2a Nsg Assmt/Obstetric 5.0</td>
</tr>
<tr>
<td>NURS 1r Arts/Sci Nsg Clinic 5.0</td>
<td>NURS 2b Assmt/Pediatric 5.0</td>
</tr>
<tr>
<td>H CRS 31 Basic Pharmacology 2.0</td>
<td>BIOL 25 Microbio/Pathphy 5.0</td>
</tr>
<tr>
<td>PHYSL 1 Intro Physiology 5.0</td>
<td>GE Courses (if needed) 3.0</td>
</tr>
<tr>
<td>TOTAL 12.0-18.0</td>
<td>TOTAL 17.0-20.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Semester</th>
<th>Fourth Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 3 Nsg Adult Old Age 10.0</td>
<td>NURS 4 Mnt Hlth Nsg/Ldrshp 5.0</td>
</tr>
<tr>
<td>H CRS 32 Adv Pharm 2.0</td>
<td>NURS 5 Critical Care Nurs 5.0</td>
</tr>
<tr>
<td>GE Courses (if needed) 3-6.0</td>
<td>GE Courses (if needed) 3-6.0</td>
</tr>
<tr>
<td>TOTAL 12.0-18.0</td>
<td>TOTAL 10.0-16.0</td>
</tr>
</tbody>
</table>

NOTE: STUDENTS MUST MEET ALL GRADUATION REQUIREMENTS OF THE COLLEGE.
LVN TO ASSOCIATE DEGREE NURSE PROGRAM

Vocational nurses who wish to complete requirements for eligibility for the registered nurse licensure examination as an Associate Degree Nurse will be considered for advanced placement. Admission to the Educational Mobility Program in Nursing is dependent upon completion of ALL prerequisite requirements, and available space. Applicants who successfully complete all requirements, but are not accepted because of class size, will be given priority ranking based on the Selection/Ranking Criteria used for admission to the first semester of the ADN Program.

Admission Requirements

1. Successful completion of an accredited Vocational Nursing Program or equivalent.
2. Graduation from high school or evidence of passing scores on the GED or Proficiency Examinations.
3. Eligibility for ENGL 1a, as demonstrated by a satisfactory score on the Bakersfield College Assessment Tests.
4. One year of high school Algebra or MATH A/200A at Bakersfield College or an equivalent course at another college. A “C” grade or higher is required.
5. Verify successful completion of Vocational Nursing Program or equivalent in one or more of the following ways:
   a. Official transcript from college or school of nursing.
   b. Copy of DD-214.
   c. Proof of current Vocational Nurse Licensure.
6. Prerequisite Courses must be completed before the application will be accepted.
   COURSES IN PROGRESS WILL NOT BE CONSIDERED: A “C” grade or better is required in all prerequisite courses.
   a. CHEM 11 or 2a at Bakersfield College or an equivalent course at another college. (Students with “B” grade in high school Algebra and Chemistry may take CHEM 1a.)
   b. ANAT 1, PHYS 1, BIOL 25 or equivalent courses at another college. Courses taken at another college must be verified by official transcripts. Requests for consideration of courses for equivalency must be made to the Bakersfield College Admissions Office. (HL SC 2, taken before Summer 1984, will be accepted.)
7. Additional courses which may be taken prior to admission to the Nursing Program and which MUST be completed for the Associate Degree Nursing. A “C” grade or higher must be obtained in all courses.
   a. Written and Oral Communication requirements. (See Graduation Requirements.)
   b. SOC 1.
   c. PSYCH 1a.
   d. Social Science requirement. (See Graduation Requirements.)
   e. PHIL 12.
8. Competency in Nursing (completed within the last two years).
   a. Fundamentals of Nursing examination—a score of 78 percent must be achieved.
   b. Applicants will be notified by mail of test results.
   c. If scores are below required level, applicant may request another testing appointment to retest the examination.
   Fundamentals of Nursing examination may be repeated no more than two times during any one year.
9. A physical examination completed by a physician of the student’s choice and appropriate immunizations are required. This is done at the student’s expense before entrance into the program. Forms are available at the Bakersfield College Health Careers Department.

Required Courses

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NOTE: STUDENTS MUST MEET ALL GRADUATION REQUIREMENTS OF THE COLLEGE.

LVN TO NON-DEGREE NURSE (30 UNIT OPTION)

Students seeking information regarding the 30-unit option preparation for the registered nurse licensing examination will be counseled individually by the Health Careers Counselor or the Director of the Associate Degree Nursing Program.

The following courses are required:

- PHYSL 1 (5 units)—Meets Board of Registered Nursing requirements in physiology. (HL SC 2, taken before Summer 1984, will be accepted.)
- BIOL 25 (5 units)—Meets Board of Registered Nursing requirements for physiology and microbiology. (HL SC 3, taken before Summer 1984, will be accepted.)
- NURS 3 (10 units)—Meets Board of Registered Nursing requirements for advanced medical-surgical nursing, geriatric nursing, and management concepts.
- NURS 4 (5 units)—Meets Board of Registered Nursing requirements for mental health nursing, psychiatric nursing, and management and leadership principles.
- NURS 5 (5 units)—Critical Care Nursing—Equivalent courses successfully completed at other accredited colleges will be accepted. Equivalency will be determined by the Bakersfield College Admissions Office on the basis of official transcripts, catalog description, course outline content comparison, and hours distribution. A challenge examination may be required when equivalency cannot be determined.

Additional College Requirements:

a. Fundamentals of Nursing examination—a score of 78 percent must be achieved.

b. Proof of current Vocational Nurse Licensure.

NOTE: CHEM 11 is a college prerequisite to PHYSL 1 and Microbiology.
Expenses:

Students will be required to purchase uniform, textbooks, and selected equipment, and provide transportation to off-campus sites for clinical experience.

TRANSFER AND CHALLENGE POLICY

Transfer—Policy

1. Academic credit earned in regionally accredited institutions of higher education for comparable prelicensure courses will be accepted for transfer.
2. A student who has successfully completed nursing courses in an approved or accredited nursing program may be eligible to receive credit for equivalent courses within the Nursing Program curriculum.
3. Equivalency will be determined on the basis of catalog description, course outline content comparison and hours distribution.
4. A challenge examination may be required when equivalency cannot be identified. One semester in residency will be required to attain degree status from the department.

Challenge by Examination—Policy

1. Challenge examinations are available for all courses in the nursing education curriculum. Students seeking challenge by examination credit will be counseled individually by the Director and/or Assistant Director.
2. Students requesting credit based upon previous work experience as a nurse assistant may challenge clinical aspect of nursing education courses included in the first level of the curriculum.
3. Challenge examinations for credit based on previous education/experience must be requested by the student six weeks prior to the start of the semester in which the course is scheduled to be taught.

Challenge Procedure for Clinical Proficiency

1. The student will be given the clinical objectives, will present himself/herself at a designated clinical area. He/she must demonstrate clinical proficiency in all areas stated in the clinical objectives as determined by the instructor.
2. Each challenge procedure will be on an individual and supervised basis.

VOCATIONAL NURSING

The Licensed Vocational Nursing Program at Bakersfield College includes four semesters of study in college classes and practical experience in several local hospitals. Upon satisfactory completion of these courses the graduates will be eligible to take the State Board Examination which is required to work as an LVN in California.

Prerequisites to the program are:
1. High school graduate or equivalent.
2. ENGL 1 with a grade of "C" or higher or ENGL 1a eligibility.
3. Reading level A or above on the Bakersfield College Placement Test (if below A level RDNG 62 is recommended before re-testing).
4. Math score on the Placement Test of 21 or higher (if below 21 MATH 50 or MATH 250 is recommended).
5. HL SC 1 or ANAT 1 with a grade of "C" or higher.

NOTE: HL SC 1 will not meet the anatomy prerequisite requirement for the LVN to Associate Degree Nurse Program.

6. Proof of adequate health status is required before final acceptance.

Additional required course:

a. PSYCH 1a (must be completed before graduation).

Additional recommended courses:

a. MED S 60a Medical Terminology.
   b. PHIL 12 Death and Dying.

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<td>NURS 1 The Arts Sci of Nsg</td>
<td>NURS 1vb Arts/Sci Nsg Clinic</td>
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Prerequisite Semester

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COURSE DESCRIPTIONS

DENTAL ASSISTING (DNT A)

50 INTRODUCTION TO DENTAL ASSISTING (3 units)

Twelve hours lecture/demonstration per week for four weeks in summer school.
Prerequisite: Admission to Dental Assisting Program.
Dental practices employment and job demands, emergency and first aid procedures and preventive dentistry. The dental health team; who they are, their job tasks and licenses.

51 MATERIALS — PROCEDURES AND INSTRUMENTATION (3 units)

Two hours lecture and three hours laboratory.
Prerequisite: Admission to the Dental Assisting Program. Completion of DNT A 50 with a grade of "C" or higher, or instructor's evaluation.
The manipulation of dental materials in relation to dental procedures along with the sequence of instrumentation found in general dentistry, i.e.: materials, instruments and procedures for completing a silver amalgam filling or a gold crown. (Formerly DNT A 51a.)

52 DENTAL ANATOMY AND TERMINOLOGY (3 units)

Two hours lecture and three hours laboratory.
Prerequisite: DNT A 50 with a grade of "C" or higher.
Introduction to general anatomy with emphasis on head and neck, teeth and supporting structures, diet and nutrition related to dental health.

53 BIO-DENTAL SCIENCES (3 units)

Three hours lecture/demonstration.
Prerequisites: Completion of DNT A 50, 51a, 52, 60 and 65a with a grade of "C" or higher.
A study of the applied aspects of pharmacology, microbiology, pathology, and nutrition which provide a better understanding of scientific principles underlying routine dental assisting procedures.

54 PRINCIPLES OF COMMUNICATION AND PSYCHOLOGY FOR THE DENTAL ASSISTANT (1 unit)

Eighteen hours of lecture.
Prerequisite: Admission into the Dental Assisting Program and completion of DNT A 50 with a grade of "C" or higher.
A general studies course presenting principles of oral and written communications and psychology for the dental assistant.

55 DENTAL OFFICE PROCEDURES (3 units)

Two hours lecture and two hours laboratory.
Prerequisites: Completion of DNT A 50, 51, 52, 58a, 60a and concurrent enrollment in W EXP 50.
Instruction in the non-clinical functions which dental auxiliaries are required to perform with emphasis on communications, scheduling appointments, making financial arrangements, recall, completing insurance forms and maintaining insurance records and maintaining an inventory and supplies.

58a CHAIRSIDE OPERATORY TECHNIQUES (3 units)

Two hours lecture and four hours laboratory.
Prerequisites: Admission to the Dental Assisting Program. Completion of DNT A 50, with a grade of "C" or higher, or instructor's evaluation.
A study of the principles of four-handed sit-down dentistry, including instrument transfer, oral evacuation, retraction, illumination and proper chair positioning.

58b CHAIRSIDE OPERATORY TECHNIQUES IN SPECIALTY DENTISTRY (3 units)

Two hours lecture and three hours laboratory.
Prerequisites: Completion of DNT A 50, 51, 52, 58a and 60a with a grade of "C" or higher.
A study of the operatory procedures done in the dental specialties offices, including periodontics, and endodontic procedures. Preventive dentistry including plaque control, analysis, communication and diet evaluation.

59 INTRAORAL PROCEDURES (2 units)

One hour lecture and three hours laboratory.
Prerequisites: DNT A 50, 51, 52, 58a, 60a, and 65a with a grade of "C" or higher or evaluation by instructor.
Provides chairside application to functions in general and specialty dentistry delegated to the dental assistant and registered dental assistant by the California Dental Practice Act. Includes 12 hours of instruction on coronal polishing.

60a DENTAL RADIOGRAPHY (3 units)

Two hours lecture and four hours laboratory.
Prerequisites: Admission to DNT A program or evaluation by the instructor. Completion of DNT A 50 with a grade of "C" or higher.
Operating x-ray equipment commonly used in dental offices; exposing, processing, x-ray film and evaluating film quality.
60b DENTAL RADIOGRAPHY (2 units)

One hour lecture and three hours laboratory.
Prerequisites: Enrollment in Dental Assisting Program or evaluation by instructor.
Grade of “C” or higher is required in DNT A 50, 51, 52, 58a and 60a.
Course is a continued study of current radiography techniques used in the dental office. New techniques such as the panoramic, and occlusal in addition to the periapical and bitewing x-rays. Patient practice in lab is required.

65a INTERMEDIATE CHAIRSIDE ASSISTING (3 units)

One hour seminar per week and twelve hours in clinic per week commencing the 10th week in the fall semester.
Prerequisites: Admission to the Dental Assisting Program. Completion of DNT A 50 with a grade of “C” or higher. Also need a grade of “C” or higher at mid-term of fall semester in DNT A 51 and 58a.
Practice in working with the dentist, patients and dental auxiliary in the assigned clinical setting. Off campus—Clinical chairside experience in the dental office including four-handed sit-down dentistry and manipulation of materials and instruments needed for common dental procedures. (i.e.; taking and pouring of preliminary impressions, caring for instruments and tray set-ups, assisting with silver amalgams and gold crowns.) Applications of DNT A 50, 51 and 58a within a dentist’s office or other clinical setting.

65b ADVANCED CHAIRSIDE AND OFFICE ASSISTING (6 units)

One hour seminar per week on campus and sixteen hours in clinic per week commencing in the first week of the fall semester.
Prerequisites: Admission to the Dental Assisting Program. Completion of DNT A 50, 51, 52, 58a, 60a and DNT A 65a with a grade of “C” or higher.
Second semester of clinical experience with assigned doctors. Further training at chairside focusing in specialty dentistry along with common general procedures, receptionist and preventive dentistry tasks. Specialty rotations are also included.

EMERGENCY MEDICAL TECHNICIAN (EMT)

• 1 EMERGENCY MEDICAL CARE (4 units)

Five hours lecture per week plus fourteen hours ER/Ambulance experience.
Prerequisite: None.
Acquaints the student with the correct techniques of emergency medical care needed by different types of patients. Stress is placed on the recognition and treatment of emergency problems. “Meets California State Department of Health Criteria” for EMT 1 (Ambulance) Training.

70 ADVANCED FIRST AID AND EMERGENCY CARE (3 units)

Three hours lecture and demonstration.
Prerequisite: None.

HEALTH CAREERS (HCRS)

• 6 CULTURAL ASPECTS OF HEALTH CARE (2 units)

Four hours lecture for nine weeks.
Prerequisite: ENGL 1a eligibility.
Concepts and theories of health care are presented and related to people from various socio-economic and cultural groups. Cultural difference, as it relates to health care, will be studied. High risk, disadvantaged groups will be identified. The effects of diet, exercise and rest on health of individuals and families will be viewed. Not open to students with credit in NURS 6.

• 31 BASIC PHARMACOLOGY (2 units)

Two hours lecture.
Prerequisite: Appropriate standing in LVN or ADN program or evaluation by instructor.
An eighteen week program which introduces the nursing student to the mathematics of dosage calculation, apothecary, household and metric measurements; the physical and chemical properties of drugs, their action, therapeutic uses, absorption and excretion, preparations and dosages, mode of administration, side effects, toxicity and treatment, interactions, contraindications and patient teaching needs.

• 32 ADVANCED PHARMACOLOGY (2 units)

Two hours lecture.
Prerequisite: Must be a licensed LVN or RN or have junior standing in RN or LVN program or evaluation by instructor.
An in-depth course on Metric and Apothecary systems, dosages, medication techniques, drug treatment modes, adverse reactions to drugs and chemical dependency. The role of the nurse in medication administration and patient observation is emphasized.

• 33 IV THERAPY (1 unit)

Twenty-four hours lecture.
Prerequisite: Must be a licensed LVN or RN or have junior standing in RN Program or evaluation by instructor.
Designed to prepare students to function as a member of the hospital IV team. Twenty-four hours of lecture are augmented by in-hospital clinical experience provided by the student's own hospital.
- **34 BASIC CARDIAC RHYTHM INTERPRETATION** (2 units)

  Four hours lecture a week for nine weeks.
  Prerequisite: Allied Health Workers.
  Designed to prepare students for interpretation of basic cardiac rhythms in the health field settings. Heart anatomy, physiology, arrhythmia interpretation and treatment will be presented.

- **35 EMT 1 RECERTIFICATION** (1 unit)

  Twenty-four hours lecture/laboratory.
  Prerequisite: Possession of a valid EMT 1 certificate which is current or which has been expired for less than twelve (12) months.
  Designed to update the skills of EMT 1 certificate-holders, as prescribed by law. Reviews and updates material covered in EMT 1.

- **50 INTRODUCTION TO HEALTH CAREERS** (2 units)

  Two hours lecture for eighteen weeks.
  Prerequisite: None.
  Designed to provide students with a foundation of knowledge regarding a variety of health careers serving as a base from which health technologies can depart. History, trends, career options, and roles will be explored. Not offered after Spring 1983.

- **54 SPANISH FOR HEALTH CAREERS** (2 units)

  Three hours lecture/drill.
  Prerequisite: None.
  The student will develop speaking, listening and reading skills in Spanish appropriate for carrying on simple exchanges in medical/health settings. Emphasis will be on oral drill and practice in simulated employee-patient situations. Not open to students with credit in SPAN 54.

- **201 BASIC SKILLS FOR THE HEALTH CAREERS** (0.5—2 units. Limit 6 units.)

  No credit will be given for time spent repeating modules.
  Approximately forty-eight hours of laboratory per unit.
  Prerequisite: None.
  Provides students who have unrealized academic potential with intensive training in the health career skills of communication, mathematics, and basic practice skills such as administering medications, and practice of aseptic techniques.

- **MEDICAL SCIENCE**

  - **Meds 50 HANDLING PATIENTS** (MED S)

    Two hours lecture/demonstration.
    Prerequisite: Acceptance in the Radiologic Technology Program.
    To acquaint the technologist with basic correct nursing care required by all patients. An overview of types of patients which require special handling; instruction and practice in handling emergencies and first aid situations.

- **60a MEDICAL TERMINOLOGY** (3 units)

  Three hours lecture.
  Prerequisite: None.
  Introductory medical terminology offering the student a basic foundation of medical terms related to the major body systems.

- **60b MEDICAL TERMINOLOGY** (3 units)

  Three hours lecture.
  Prerequisite: MED S 60a.
  A course in medical terminology which broadens the background of the student, providing additional medical terminology, particularly in the specialty medical fields.

- **MOBILE INTENSIVE CARE: PARAMEDIC (MICP)**

  - **2a MOBILE INTENSIVE CARE: PARAMEDIC** (8 units)

    Six hours lecture/demonstration and thirty-six hours by arrangement for extrication procedures/testing.
    Prerequisites: EMT 1, MED S 60a, and HL SC 1 with grades of “C” or higher.
    Topics covered: Coronary/Critical Care, Special Emergency Techniques, OB Asepsis, Physical Assessment, Radio Communications, Extrication Techniques. Students are also required to take H CRS 31 and 34.

  - **2b HOSPITAL CLINICAL EXPERIENCE** (4 units)

    Two hundred hours of hospital clinical experience.
    Prerequisite: MICP 2a.
    Acquaints students with correct techniques for paramedic level care. Clinics include: OR, ER, OB, ICU, CCU.

  - **2c MOBILE INTENSIVE CARE UNIT FIELD EXPERIENCE** (4 units)

    Two hundred hours field experience.
    Prerequisites: MICP 2a; concurrent enrollment in MICP 2b.
    Acquaints students with correct techniques for emergency care in the field. (Formerly EMT 2c.)

- **PRIMARY CARE ASSOCIATE (PCA)**

  - **50 PRIMARY CARE ASSOCIATE** (2 units)

    Forty-four hours of lecture.
    Prerequisite: Admission to the PCA (Physician’s Assistant) Program.
    Introduction and orientation to the social, legal, and ethical aspects of the Primary Care Associate/Physician’s Assistant role in practice.
RADIOLOGIC TECHNOLOGY (RAD T)

1 INTRODUCTION TO RADIOLOGIC TECHNOLOGY (2 units)

Six hours lecture for six weeks.
Prerequisite: Acceptance in the Radiologic Technology Program.
An orientation to the role of the Radiologic Technologist as an integral part of the health care team. An overview of the medical use of radiation, interpersonal communication, medical ethics, radiation safety regulations and protection, foundations and futures of medicine and radiology, and a general survey of hospital and departmental operations are stressed. Course is offered in Summer Session.

2a RADIOGRAPHIC ANATOMY AND POSITIONING 1 (3 units)

Two hours lecture and three hours laboratory.
Prerequisites: Concurrent enrollment in HL SC 1, and acceptance in the Radiologic Technology Program.
Instruction and practical experience in the radiographic positioning of the patient for proper visualization of structures on the radiograph with film correlation in anatomy and technical aspects.

2b RADIOGRAPHIC ANATOMY AND POSITIONING 2 (3 units)

Two hours lecture and three hours laboratory.
Prerequisite: Completion of first semester of Radiologic Technology Program with grades of “C” or higher.
Instruction and practical experience in the radiographic positioning of the patient for proper visualization of structures on the radiograph with film correlation in anatomy and technical aspects.

2c RADIOGRAPHIC ANATOMY AND POSITIONING 3 (3 units)

Two hours lecture and three hours laboratory.
Prerequisite: Completion of second semester of Radiologic Technology Program with grades of “C” or higher.
Instruction and practical experience in the radiographic positioning of the patient for proper visualization of structures on the radiograph with film correlation in anatomy and technical aspects.

3a RADIOGRAPHIC PRINCIPLES 1 (3 units)

Two hours lecture and three hours laboratory.
Prerequisite: Acceptance in the Radiologic Technology Program.
The principles of darkroom chemistry and techniques, x-ray film, screen, and cassette characteristics, causes of image formation, factors affecting the radiographic image, beam restricting devices, and the physical factors involved in photographic processing are stressed.

3b RADIOGRAPHIC PRINCIPLES 2 (3 units)

Two hours lecture and three hours laboratory.
Prerequisite: Completion of first semester of Radiologic Technology Program with grades of “C” or higher.
The principles of producing the optimum radiograph, manipulation of exposure factors, radiographic techniques, and technique chart construction are explored. Instruction in the use of accessory equipment in obtaining the optimum radiograph stressing radiation safety.

4 CLINICAL EDUCATION 1 (5 units)

Sixteen hours clinical experience.
Prerequisites: Acceptance in Radiologic Technology Program and completion of RAD T 1.
Supervised clinical experiences are provided to perfect skills in a variety of basic radiographic procedures. Correlated with RAD T 2a. (Formerly RAD T 6a.)

5 RADIATION PHYSICS (3 units)

Two hours lecture and three hours laboratory.
Prerequisite: Completion of first semester of Radiologic Technology Program with grades of “C” or higher.
The physics of electromagnetic radiation, electricity, current, resistance, and interaction of radiation with matter are given. Types of x-ray machines, circuitry, x-ray tubes, and production of x-rays are stressed. (Formerly RAD T 4.)

6 CLINICAL EDUCATION 2 (5 units)

Sixteen hours clinical experience.
Prerequisite: Completion of first semester of Radiologic Technology Program with grades of “C” or higher.
Supervised clinical experiences are provided to perfect skills in a variety of basic radiographic procedures. Correlated with RAD T 2b. (Formerly RAD T 6b.)

7 CLINICAL EDUCATION 3 (5 units)

Forty hours clinical experience per week for nine weeks. (Three hundred sixty hours minimum.)
Prerequisite: Completion of first year of Radiologic Technology Program with grades of “C” or higher.
Correlation and extension of radiologic procedures demonstrated in RAD T 2a—2b. Course is offered in Summer Session.
9 INTRODUCTION TO ANGIOGRAPHY AND PARARADIOLOGIC IMAGING MODALITIES (2 units)

Two hours lecture.
Prerequisite: Completion of first year of Radiologic Technology Program with grades of “C” or higher.
Orientation to neuroradiographic and angiographic examinations including special equipment requirements, supplies, techniques and applications are discussed. Introduction to auxiliary imaging modalities, specifically digital radiography, computer tomography, diagnostic medical sonography, thermography, magnetic resonance, nuclear medicine and radiation therapy is also presented.

10 CLINICAL EDUCATION 4 (8 units)

Twenty-four hours clinical experience.
Prerequisite: Completion of first year of Radiologic Technology Program including RAD T 7 with grades of “C” or higher. Supervised clinical experiences are provided to perfect skills in a variety of advanced radiographic procedures. Correlated with RAD T 2c. (Formerly RAD T 17a.)

11 RADIOGRAPHIC PATHOLOGY AND TERMINOLOGY (3 units)

Three hours lecture.
Prerequisite: Completion of third semester of Radiologic Technology Program with grades of “C” or higher. An overview of medical pathology and terminology selected on the basis of relevance to radiologic examinations. The nature and cause of disease, definition of terms, radiographic findings, as well as lesions affecting organs and systems are presented. (Formerly RAD T 14.)

12 RADIATION SAFETY AND BIOLOGY (2 units)

Two hours lecture.
Prerequisite: Completion of third semester of Radiologic Technology Program with grades of “C” or higher. Fundamental concepts of radiation protection and application of existing laws to patients and occupationally exposed personnel. The biological effects on living systems, concepts of radiation units, dose determinations, and personnel monitoring are stressed.

13 CLINICAL EDUCATION 5 (8 units)

Twenty-four hours clinical experience.
Prerequisite: Completion of third semester of Radiologic Technology Program with grades of “C” or higher. Supervised clinical experiences are provided to further perfect techniques in a variety of advanced radiographic procedures. Extension of radiographic procedures demonstrated in RAD T 2a—2b—2c. (Formerly RAD T 17b.)

14 CLINICAL EDUCATION 6 (3 units)

Forty hours clinical experience per week for five weeks. (Two hundred hours minimum.)
Prerequisite: Completion of fourth semester of Radiologic Technology Program with grades of “C” or higher.
An intensive advanced clinical experience designed to prepare the trainee for national and state examinations in diagnostic radiologic technology. (Formerly RAD T 18.)

REGISTERED NURSING (NURS)

1 FUNDAMENTAL ARTS AND SCIENCE OF NURSING (5 units)

Five hours lecture per week.
Prerequisite: Admission to the ADN or LVN Program. Provides a foundation of basic nursing arts and sciences necessary for the practice of nursing. The evolution of nursing is discussed and trends identified. Introduces the nursing process. Concepts of role, asepsis, communication, mobility, safety and comfort, nutrition and fluid homeostasis, elimination, pharmacology, and oxygenation are presented. Observation, charting and the special nursing needs of the geriatric patients are introduced. The care of clients with long term illnesses is presented.

1r THE ARTS AND SCIENCE OF NURSING CLINIC (5 units)

Fifteen hours clinical experience.
Prerequisite: Concurrent enrollment in NURS 1. Introduces the student to nursing care in the clinical setting. Application of concepts presented in NURS 1.

2a NURSING ASSESSMENT AND HEALTH PROMOTION THROUGH THE LIFE SPAN (OBSTETRICS) (5 units)

Five hours lecture and fifteen hours clinical laboratory experience for nine weeks. Prerequisites: NURS 1 and 1r with a grade of “C” or higher. Focuses on nursing interventions in preventative, remedial, supportive, rehabilitative and teaching aspects of nursing from birth through young adulthood. A holistic, i.e., bio-psychosocial approach to nursing care is applied. Concepts of wellness are presented. These formulate a basis of departure for the study of illness. Nursing process provides the framework for deliberative nursing interventions presented throughout the course. The student is guided by specific behavioral objectives for each learning experience.
• 2b NURSING ASSESSMENT AND HEALTH PROMOTION THROUGH THE LIFE SPAN (PEDIATRICS) (5 units)

Five hours lecture and fifteen hours clinical laboratory experience for nine weeks. 
Prerequisites: Completion of NURS 2a or its equivalent with a “C” or higher and HLSC 2 (may be taken concurrently). 
Focuses on nursing interventions in preventative, remedial, supportive, rehabilitative and teaching aspects of nursing from birth through young adulthood. A holistic, i.e., bio-psychosocial, approach to nursing care is applied. Concepts of wellness are presented. These formulate a basis of departure for the study of illness. Nursing process provides the framework for deliberative nursing interventions presented throughout the course. The student is guided by specific behavioral objectives for each learning experience. (Formerly NURS 2.)

• 3 NURSING ASSESSMENT AND HEALTH PROMOTION — ADULT THROUGH OLD AGE (10 units)

Five hours lecture and fifteen hours clinical laboratory per week. 
Prerequisite: NURS 2b with a grade of “C” or higher. 
Continues the study of nursing intervention in preventative, remedial, supportive, rehabilitative and teaching aspects of nursing throughout the life span. Focus is on health concerns of the young adult, middle-aged and old age persons. Nursing process provides the framework for deliberative nursing interventions presented throughout the course. Correlated clinical experiences are provided with patients from the age groups of young adulthood to old age who have complicated health problems.

• 4 NURSING PROCESS — THE PERSON IN MENTAL HEALTH CRISIS, AND THE LEADERSHIP ROLE (5 units)

Five hours lecture and fifteen hours clinical laboratory for nine weeks. 
Prerequisite: NURS 3 with a grade of “C” or higher. 
Course has two components. First component focuses on the person in mental health crisis. Concepts of acute psychiatric care and treatment are presented. The nursing process is used as the framework for preventative, remedial, supportive rehabilitative and teaching aspects of nursing intervention in the mental health setting. The therapeutic nurse-patient relationship is emphasized. Self-growth is an expected outcome. Second component examines leadership and management principles and prepares the student for the leadership role expected of a registered nurse. Clinical practice is provided in a variety of community settings.

• 5 NURSING PROCESS — THE PATIENT REQUIREING CRITICAL CARE (5 units)

Five hours lecture and fifteen hours clinical laboratory for nine weeks. 
Prerequisite: NURS 4 with a grade of “C” or higher. 
The course is designed to prepare students for nursing responsibilities in the critical care areas. Common concepts of critical care are initially presented. The student elects an area of concentration and is expected to assume in-depth study in that area. Appropriate clinical practice is arranged in intensive care, coronary care, renal dialysis, emergency room, operating room, and recovery room as scheduling permits.

• 6 CULTURAL ASPECTS OF NURSING (2 units)

Four hours lecture for nine weeks. 
Prerequisite: Completion of NURS 2b or its equivalent with a “C” or higher.
Concepts and theories of nursing are presented and related to people from various socio-economic and cultural groups. Cultural difference, as it relates to health care, will be studied. High risk, disadvantaged groups will be identified. The effects of diet, exercise and rest on health of individuals and families will be viewed. Not offered after Spring 1983.

• 7 FAMILY HEALTH NURSING (2 units)

Four hours lecture for nine weeks. 
Prerequisites: Completion of NURS 3 with a grade of “C” or higher and completion of NURS 6 or consent of instructor. 
Concepts and theories of community and family health nursing are presented. Roles are identified and discussed. A family-centered approach to nursing is explored through the study of the family unit and the effects of illness on family roles and behavior. Students investigate families that fall to abusive and abusive families. Health teaching is a major focus. Not offered after Spring 1983.

• 8 DISTRIBUTIVE CARE FOR PEOPLE WITH HEALTH NEEDS (5 units).

Four hours lecture and eighteen hours clinical laboratory per week for nine weeks. 
Prerequisite: NURS 7 with a grade of “C” or higher. 
Prepares the student to carry out the nursing process with patients and families in the home, the clinic, and other health service delivery settings. Students will care for the chronically ill and/or handicapped, assist in the process of habilitation and rehabilitation; and become involved in the roles and functions of community health agencies. 
Not offered after Spring 1983.

90 CURRENT PRACTICES IN NURSING (0 unit)

Prerequisite: None.

Designed to meet the continuing education requirements of the California State Board of Registered Nursing for license renewal. Continuing education presentations may be offered through lectures, workshops, seminars, short and long term courses, with a minimum of three hours duration. All presentations are approved by the California State Board of Registered Nursing. Nurses must have a total of thirty hours of continuing education within the two years prior to license renewal. A certificate of completion will be issued upon completion of each offering. Bakersfield College’s continuing education provider number is 00338.
**VOCATIONAL NURSING**

(V NRS)

• **NURS 1 FUNDAMENTAL ARTS AND SCIENCE OF NURSING (5 units)**

Five hours lecture per week.
Prerequisite: Admission to the ADN or LVN Program.

Provides a foundation of basic nursing arts and sciences necessary for the practice of nursing. The evolution of nursing is discussed and trends identified. The course introduces the nursing process. Concepts of role, asepsis, communication, mobility, safety and comfort, nutrition and fluid homeostasis, elimination, pharmacology, and oxygenation are presented. Observation, charting and the special nursing needs of the geriatric patients are introduced. The care of clients with long term illnesses is presented.

**Clinical Practice—Vocational Nursing**

NURS 1va—1vb—1vc THE ARTS AND SCIENCE OF NURSING CLINIC

NURS 1va and 1vb—sixteen hours clinical laboratory experience.
NURS 1vc—twenty-four hours clinical laboratory experience.
Prerequisite: Admission to the LVN Program.

Introduction to nursing procedures and clinical experience in nursing care of patients with disease conditions of body systems.

• **NURS 2 PHARMACOLOGY (2 units)**

Two hours lecture.
Prerequisites: Admission to the Vocational Nursing program and concurrent enrollment in V NRS 65a.


• **NURS 3 CARDIOVASCULAR NURSING (2 units)**

Four hours lecture per week for nine weeks.
Prerequisites: Admission to the Vocational Nursing program and concurrent enrollment in V NRS 65a.

A study of the etiology, symptomatology, treatment and nursing care of patients of all ages, with illnesses affecting the cardiovascular system.

• **NURS 4 GASTROINTESTINAL NURSING (2 units)**

Two hours lecture per week for nine weeks.
Prerequisites: Admission to the third semester of the Vocational Nursing program and concurrent enrollment in NURS 1vb.

A study of the etiology, symptomatology, treatment and nursing care of patients of all ages, with illnesses affecting the gastrointestinal system.

• **NURS 5 RESPIRATORY NURSING (2 units)**

Two hours lecture per week for nine weeks.
Prerequisites: Admission to the third semester of the Vocational Nursing program and concurrent enrollment in NURS 1vb.

A study of the etiology, symptomatology, treatment and nursing care of patients of all ages, with illnesses affecting the respiratory system.

• **NURS 6 ENDOCRINE NURSING (1 unit)**

Two hours lecture per week.
Prerequisites: Admission to the third semester of the Vocational Nursing program and concurrent enrollment in NURS 1vb.

A study of the etiology, symptomatology, treatment and nursing care of patients of all ages with disorders of the endocrines.

• **NURS 7 MATERNITY NURSING (2 units)**

Two hours lecture per week.
Prerequisites: Admission to the third semester of the Vocational Nursing program and concurrent enrollment in NURS 1vb.

A study of all phases of the maternity cycle and the nursing care of the obstetrical patient and the newborn infant.

• **NURS 8 ORTHOPEDIC NURSING (2 units)**

Four hours lecture per week for nine weeks.
Prerequisites: Completion of the first semester of the Vocational Nursing program and concurrent enrollment in NURS 1vb.

A study of the disease conditions of the musculoskeletal system in relation to causes, symptoms, diet, medications, nursing care, prevention and rehabilitation.

• **NURS 9 GENITOURINARY NURSING (2 units)**

Four hours lecture per week for nine weeks.
Prerequisites: Completion of the first semester of the Vocational Nursing program and concurrent enrollment in NURS 1vb.

A study of the etiology, symptomatology, treatment and nursing care of genitourinary conditions in patients of all ages.
Activity courses (3 through 9 and 75), athletic courses (10 through 29) and lecture, lab (through 65), may be taken once (1) and repeated three (3) additional times. Example: 6T (Tennis) a student may not take beginning tennis (4 times) and advanced tennis (4 times). That student may take four (4) tennis classes; all four beginning or intermediate or advanced or any combination of those equaling four (4) enrollments.

ACTION ON PROPOSAL:

Instructional Dean - Approved [Signature] Denied ______ Date 3/12/84

Dean of General Education - Approved [Signature] Denied ______ Date 3/12/84

Dean of Instruction - Approved ______ Denied ______ Date ______

COMMENT: Information to Curriculum Committee:

Copies to: (1) Department (3) Instructional Deans
(2) Curriculum Committee (4) Office of Instruction

Rev. 8/83
• 62 NEUROSENSORY NURSING (2 units)

Four hours lecture per week for nine weeks. 
Prerequisites: Completion of the second semester of the Vocational Nursing program and concurrent enrollment in NURS 1vc. 
A study of the etiology, symptomatology, treatment and nursing care of neurosensory conditions in patients of all ages.

• 63 INTEGUMENTARY NURSING (1 unit)

Two hours lecture per week for nine weeks. 
Prerequisites: Completion of the second semester of the Vocational Nursing program and concurrent enrollment in NURS 1vc. 
A study of the etiology, symptomatology, treatment and nursing care of conditions of the integumentary system in patients of all ages.

65a—65b—65c CLINICAL PRACTICE (6—7—7 units)

20—20—20 hours of clinical laboratory per week. 
Prerequisites: Admission to the Vocational Nursing program and concurrent enrollment in Vocational Nursing classes. 
Introduction to nursing procedures and clinical experience in nursing care of patients with disease conditions of body systems. Not offered after Spring 1983. See NURS 1va—1vb—1vc.

HEALTH AND PHYSICAL EDUCATION

Athletics
Health Education
Physical Education

The exact program to be undertaken by a student in the physical education major at Bakersfield College depends on the requirements of the transfer institution. Students must comply with the requirements as shown in the catalog under Graduation Requirements. Counselors/advisors will assist the student in planning for an Associate degree.

Required Courses

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>PH ED 40 Intro Physical Educ 2.0</td>
<td>PH ED 35a Pro Act M/W Ten/Glf 2.0</td>
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<tr>
<td>PH ED 41 Recreation Leadership 2.0</td>
<td>PH ED 35b Racq Sports/Fitness 2.0</td>
</tr>
<tr>
<td>OR</td>
<td>PH ED 35c Pro Act M/W Aqu/TriF 2.0</td>
</tr>
<tr>
<td>PH ED 42 Community Recreation 2.0</td>
<td>PH ED 35d Pro Act M/W Tm Spts 2.0</td>
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<tr>
<td>ANAT 11 Human Anatomy 4.0</td>
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<tr>
<td>PHYS 11 Human Physiology 4.0</td>
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<tr>
<td>PH ED 31a Standard First Aid 1.0</td>
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</tbody>
</table>

Additional units in Physical Education activity classes are strongly recommended.

RECREATION

Students majoring in recreation at Bakersfield College should consult the catalog of the four-year college to which they intend to transfer. General education and major requirements must be considered in formulating a two-year lower division program as well as requirements in specific areas of concentration.

Required Courses

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<tr>
<td>PH ED 42 Commnty Recreatn 2.0</td>
<td>PH ED 31a Standard First Aid 1.0</td>
</tr>
<tr>
<td>PH ED 41 Recreation Leadership 2.0</td>
<td>PH ED 43 Recreatn Fld Exp 2.0</td>
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Other Suggested Courses

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<tr>
<td>PH ED 35b Racq Sports/Fitness 2.0</td>
<td>PH ED 35d Pro Act M/W Tm Spts 2.0</td>
</tr>
</tbody>
</table>
HEALTH EDUCATION (H ED)

• 1 PRINCIPLES OF HEALTH EDUCATION (2 units)
  Two hours lecture
  Prerequisite: None.
  An examination of today's most important health problems and practical means of effectively dealing with them. Major topics include mental and emotional health, nutrition, physical fitness, human sexuality, the nature of alcohol and tobacco and their effects upon the body, environmental health, consumer affairs, communicable diseases and chronic disorders.

• 2 PRINCIPLES OF HEALTH EDUCATION (2 units)
  Three hours lecture.
  Prerequisite: None.
  For description, see H ED 1.

• 3 HEALTH EDUCATION AND FIRST AID (3 units)
  Three hours lecture.
  Prerequisite: None.
  An examination of today's most important health problems and practical means of effectively dealing with them. Major topics include mental and emotional health, nutrition, physical fitness, human sexuality, the nature of alcohol and tobacco and their effects upon the body, environmental health, consumer affairs, communicable diseases and chronic disorders. Also covers Standard First Aid, including wounds and their care, shock, artificial respiration, C.P.R., injuries, burns, effects of heat and cold and the transportation of the injured. H ED 3 is equivalent to H ED 1 or 2 and PH ED 31a.

50 APPLIED HEALTH SCIENCE (3 units)

Three hours per week.
Prerequisite: None.
A practical approach to the study of health concepts and scientific principles designed to enable the student to improve and maintain his total health for more effective living, to provide the student with sound guidelines for making intelligent decisions about his health and that of others, and to challenge the student to involvement in campus and community activities for improved environmental health conditions.

PHYSICAL EDUCATION (PH ED)

Activity courses (3 through 9 and 75), athletic courses (10 through 29) and lecture, lab (35 through 65), may be taken once and repeated three additional times. Example: 6T (Tennis)—A student may not take beginning tennis four times and advanced tennis four times. That student may take four tennis classes—all four beginning or intermediate or advanced or any combination of those equaling four enrollments.

• 3L LIMITED ACTIVITY FOR MEN AND WOMEN (1—1—1—1 unit)
  Two hours per week.
  Referral to an activity appropriate to the individual's physical ability or individualized instruction for restricted students in conjunction with physician's advice.

• 4 TEAM ACTIVITIES FOR MEN (1—1—1—1 unit)
  Two hours per week.
  Prerequisite: None.
  4c—combatives, 4sc—soccer, 4ts—team sports.

• 5 TEAM ACTIVITIES FOR WOMEN (1—1—1—1 unit)
  Two hours per week.
  Prerequisite: None.
  5sdw—self defense for women (0.5 to 1 unit), 5ts—team sports, 5w—softball.

• 6 COEDUCATIONAL TEAM AND INDIVIDUAL ACTIVITIES (1—1—1—1 unit)
  Two hours per week.
  Prerequisite: None.
  6a—archery, 6ac—aqua calisthenics, 6b—bowling, 6bad—badminton, 6bb—basketball, 6bl—beginning ballet, 6bl—intermediate ballet, 6ct—circuit training, 6d—diving, 6pf—physical fitness, 6g—golf, 6gi—intermediate golf, 6hbr—handball/racquetball, 6hx—health exercises, 6jd—jazz dance, 6ls—life saving, 6m—body mechanics, 6md—modern dance, 6md—intermediate modern dance, 6s—swimming, 6sf—swim and stay fit, 6sk—dry skiing (snow), 6sk—intermediate dry skiing (snow), 6ti—tennis, 6ti—intermediate tennis, 6v—volleyball, 6vi—intermediate volleyball, 6ws—water safety, 6wski—water skiing.

• 6fa FITNESS ASSESSMENT (0.5 unit. Credit/No Credit.)

• 7 ADVANCED TEAM AND INDIVIDUAL ACTIVITIES FOR MEN (1—1—1—1 unit)
  Two hours per week.
  Prerequisite: Completion of a basic course in the activity.
  7b—advanced baseball, 7bb—advanced football, 7m—advanced body mechanics, 7tr—advanced track, 7w—advanced wrestling. Some activities require weekend field trips.
• 8 ADVANCED TEAM ACTIVITIES FOR WOMEN (1-1-1-1 unit)

Two hours per week.
Prerequisite: Completion of a basic course in the activity.
8bb—advanced basketball, 8gt—advanced gymnastics, 8tr—advanced track and field.

• 9 ADVANCED TEAM AND INDIVIDUAL COEDUCATIONAL ACTIVITIES
(1-1-1-1 unit)

Two hours per week.
Prerequisite: Completion of a basic course in the activity.
9a—advanced archery, 9bad—advanced badminton, 9g—advanced golf, 9md—advanced modern dance, 9s—advanced swimming, 9t—advanced tennis, 9v—advanced volleyball.

INTERCOLLEGIATE ATHLETICS

In order to be eligible for athletic competition, students must meet the eligibility requirements of the State Committee on Athletics and of the Metropolitan Conference. Continuous enrollment in at least 12 units of work is required during the season of competition.

• 10 INTERCOLLEGIATE FOOTBALL (2-2-2-2 units)

Intercollegiate competition for men. May be substituted for physical education activity.

• 11 INTERCOLLEGIATE BASKETBALL
(2-2-2-2 units Fall; 1-1-1-1 unit Spring)

Intercollegiate competition for men. May be substituted for physical education activity.

• 12 INTERCOLLEGIATE TRACK AND FIELD (2-2-2-2 units)

Intercollegiate competition for men. May be substituted for physical education activity.

• 13 INTERCOLLEGIATE TENNIS (2-2-2-2 units)

Intercollegiate competition for men. May be substituted for physical education activity.

• 14 INTERCOLLEGIATE BASEBALL (2-2-2-2 units)

Intercollegiate competition for men. May be substituted for physical education activity.

• 15 INTERCOLLEGIATE SWIMMING (2-2-2-2 units)

Intercollegiate competition for men. May be substituted for physical education activity.

• 16 INTERCOLLEGIATE GOLF (2-2-2-2 units)

Intercollegiate competition for men. May be substituted for physical education activity.

• 17 INTERCOLLEGIATE CROSS-COUNTRY (2-2-2-2 units)

Intercollegiate competition for men. May be substituted for physical education activity.

• 20 INTERCOLLEGIATE WRESTLING (2-2-2-2 units)

Intercollegiate competition for men. May be substituted for physical education activity.

• 21 WOMEN'S INTERCOLLEGIATE SWIMMING (2-2-2-2 units)

Minimum ten hours participation per week.
Prerequisite: Intermediate or advanced skill in swimming.
Intercollegiate swimming competition for women. Specialized training in swimming skills and competitive swimming techniques. May be substituted for physical education activity.
• 22 WOMEN'S INTERCOLLEGIATE TENNIS (2-2-2-2 units)
  Prerequisite: Intermediate or advanced skill in tennis.
  Intercollegiate tennis for women. May be substituted for physical education activity.

• 25 WOMEN'S INTERCOLLEGIATE VOLLEYBALL (2-2-2-2 units)
  Prerequisite: Demonstrated competency in the fundamental skills of volleyball.
  Intercollegiate competition for women. May be substituted for physical education activity.

• 26 INTERCOLLEGIATE TRACK AND FIELD FOR WOMEN (2-2-2-2 units)
  Minimum ten hours participation per week.
  Prerequisite: Demonstrated speed in conditioning and specialized training for performance in intercollegiate track and field.

• 27 INTERCOLLEGIATE CROSS-COUNTRY FOR WOMEN (2-2-2-2 units)
  Minimum ten hours participation per week.
  Prerequisite: None.
  The student performer will engage in a conditioning and specific training schedule designed to prepare her for optimum performance in cross-country meets.

• 28 WOMEN'S INTERCOLLEGIATE BASKETBALL (2-2-2-2 units)
  Minimum ten hours participation per week.
  Prerequisite: Must meet athletic code eligibility requirements.
  Athletes will be involved in strenuous physical conditioning programs designed to enhance skills and competitive play.

• 29 WOMEN'S INTERCOLLEGIATE SOFTBALL (2-2-2-2 units)
  Minimum ten hours participation per week.
  Prerequisite: Must meet athletic code eligibility requirements. Softball experience.
  Athletes will be involved in a strenuous physical conditioning program designed to enhance skills and competitive play.

• 32 SHAPE UP (3-3-3-3 units)
  Six hours participation.
  Prerequisites: Students must be symptom free of any cardio-vascular disease or have a physician's clearance to participate. Any individual over thirty-five years of age should have a physical examination and doctor's approval for participating in this program. A total physical fitness program which emphasizes fitness assessment, cardio-vascular exercises, muscle toning, nutrition analysis, and weight control. Basic principles of exercise physiology are taught so students will understand the underlying reasons for lifelong exercise.

• 35a—35b—35c—35d PROFESSIONAL ACTIVITIES FOR MEN AND WOMEN (2 units)
  Three hours lecture and laboratory.
  Prerequisite: None.
  35a—tennis/golf, 35b—racquet sports/foundations of fitness, 35c—aquatics/track and field, 35d—team sports.

• 40 INTRODUCTION TO PHYSICAL EDUCATION (2 units)
  Two hours lecture.
  Prerequisite: Major or minor in Physical Education or Recreation.
  Designed for physical education majors and minors and recreation leaders. A survey of the basic principles underlying physical education. The place and contribution of physical education in the education program.

• 41 RECREATION LEADERSHIP (2 units)
  Two hours lecture.
  Prerequisite: None.
  Designed for majors or minors in physical education or recreation. but is open to any student interested in preparing for summer recreation work. Designed to give prospective teachers in recreation the full meaning and scope of recreation leadership. Problems of organization, types of activities, and problems of leadership form the basic elements of the course.

• 42 COMMUNITY RECREATION (2 units)
  Two hours lecture.
  Prerequisite: None.
  Designed for majors or minors in physical education or recreation. May be taken by anyone interested in preparing for summer or part-time recreational supervision work. Designed for understanding of the structure of organized recreation and its further development. Emphasizes recognizing the many forces, resources and interests which are required to provide community recreation coverage.
• 43 RECREATION FIELD EXPERIENCE (2-2-2-2 units)
One hour weekly seminar and six hours assigned field work.
Prerequisite: None.
Designed for majors or minors in physical education or recreation, but is open to any student interested in preparing for summer recreation work. Field work refers to a period of time spent by a student in the field of recreation or physical education. It is a college sponsored and college controlled phase of laboratory experience for which suggested courses in recreation are offered.

• 45 THEORY OF FOOTBALL (2-2-2 units)
Five hours lecture.
Prerequisite: Student should be a major or minor in physical education although the course may be taken as an elective.
Designed to give students a better understanding of the principles of offensive and defensive football and to prepare physical education majors for a coaching technique course.

• 46 CAMP LEADERSHIP (2 units 2 hours)
One hour lecture.
Prerequisite: None.
Rules and officiating techniques for women's sports. 51a basketball and volleyball; 51b field sports, softball, tennis.

• 53a TRACK AND FIELD TECHNIQUE (2 units)
Two hours per week.
Prerequisite: None.
Provides a base for teaching and coaching in the area of track and field. Covers philosophy, program promotion, conducting a track and field meet and ways of teaching the various events.

• 53b METHODS IN TRACK AND FIELD (2 units)
Two hours per week.
Prerequisite: None.
Designed for those interested in teaching track and field to the beginner. Provides an opportunity for class participation in a learn-by-doing setting. Explores philosophies of motivation, workout organization and techniques of meet organization and administration.

60—61—62—63 PRINCIPLES OF OFFICIATING
(1.5—1.5—1.5—1.5 units)
Twenty-seven hours lecture per course. Each course may be taken once and repeated three times.
Prerequisite: None.
The following areas are covered: 60—high school football, 61—basketball, 62—baseball, 63—wrestling.

64 PRINCIPLES OF UMPIRING SOFTBALL (1.5—1.5—1.5—1.5 units)
Three hours lecture per week for ten weeks.
Prerequisite: None.
The student will be able to satisfactorily officiate a men's or women's softball game by applying the principles of officiating that they have learned by participating in the lectures, tests, clinics and demonstrations.

65 PRINCIPLES OF REFEREEING SOCCER (1.5—1.5—1.5—1.5 units)
Three hours lecture/demonstration per week for ten weeks.
Prerequisite: None.
Student will be able to officiate a men's or women's soccer game by applying the principles of officiating learned by participating in the lectures, tests, clinics and demonstrations.

66 ADVANCED OFFICIATING TECHNIQUES—COLLEGIATE FOOTBALL
(1—1—1—1 unit)
One hour lecture and one hour seminar for nine weeks.
Prerequisite: Three years of high school officiating.
The student will concentrate on the rules and mechanics of college officiating, discuss rules of officiating and the mechanics of putting the rules into effect. Emphasizes practical application of mechanics.

71b WATER SAFETY INSTRUCTOR'S TRAINING (1 unit)
Twenty-seven hours minimum.
Prerequisite: Current senior life saving card.
Principles and techniques for instructors in water safety and life saving classes. Lecture, demonstration and laboratory techniques applied to the solution of problems presented in the instruction of various water safety and life saving principles and materials.

75 FITNESS FOR LIVING (1—1—1—1 unit)
Two hours per week.
Prerequisite: None.
A basic course in physical fitness with emphasis on cardio-vascular improvement through a wide range of physical activities and games to include jogging, continuous motion exercise, weight training, volleyball, handball, racquetball, swimming and basketball.
The Industrial Education Department offers the students the opportunity to select one of several occupational careers that may prepare them to take their place in industry in related occupations upon the completion of a selected major.

Courses are also designed for the students who have not had courses in high school that would prepare them for majors in this department.

The students may develop programs with the aid of the department counselor to meet career needs. Courses may include a study leading to specific career goals: the Associate Degree or lower division courses that lead to the Bachelor of Arts or Bachelor of Science Degree in Industrial Arts or Industrial Technology.

CERTIFICATES OF ACHIEVEMENT

These training programs are designed for those who prefer career specialization courses and the earliest possible opportunity for job placement and/or the establishment of a self-operated small business. Students wishing greater in-depth preparation may continue toward more advanced courses, an associate degree, or transfer to a four-year institution.

Programs offering these specialized certificates include: Auto Body, Auto Brakes and Wheel Alignment, Auto Engine Overhaul, Automatic Transmission, Auto Tune-Up and Emission Control, Cabinetmaking, Computer Aided Manufacturing, Electronics Technology, Machine Tool Metalworking, Surveying, and Welding. Each program consists of basic requirements or equivalents and suggested electives. The electives should be selected in consultation with departmental counseling and specialist staff.

Upon completion of the requirements, the student may apply for a Certificate of Achievement. Certificates are awarded subject to the approval of the lead instructor and the department chairperson.

AUTO BODY CERTIFICATE PROGRAM

Minimum units required — 36

Required Courses — 26 units

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<tr>
<td>AUTO 107a</td>
<td>WELD 1</td>
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<td>AUTO 107b</td>
<td>OR WELD 70</td>
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Electives (Minimum of 10 units)

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<tr>
<td>AUTO 56c</td>
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<tr>
<td>AUTO 56d</td>
<td>AUTO 59</td>
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<tr>
<td>AUTO 73</td>
<td>OR AUTO 108</td>
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<td>AUTO 108</td>
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</tbody>
</table>

Other Suggested Courses

AUTO 1 Basic Auto (3), AUTO 57 Parts Sales/Mngmnt (2); approved English (3); MCH S 1 Machine Metalworking (3) or MCH S 52a Elem Machine Shop (2); approved mathematics (3); PHIL 53ab Work Ethics (3); WELD 72 Advanced Arc Welding (3); W EXP 50 Coop Work Expr Educ (4).
## AUTO BRAKES AND WHEEL ALIGNMENT CERTIFICATE PROGRAM

**Minimum units required – 24**

**Required Courses (Minimum 18 units)**

<table>
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<tr>
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<th>Course Title</th>
<th>Units</th>
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<tr>
<td>AUTO 103</td>
<td>Automotive Brakes</td>
<td>6.0</td>
</tr>
<tr>
<td>AUTO 108</td>
<td>Auto Steer/Suspens</td>
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<tr>
<td>WELD 1</td>
<td>Intr Oxy-Acet Weldg</td>
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<tr>
<td>WELD 70</td>
<td>Intr Oxy-Acet Weldg</td>
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**Electives (Minimum of 6 units)**

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<tbody>
<tr>
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<td>Machine Metalworking</td>
</tr>
<tr>
<td>OR</td>
<td>OR</td>
</tr>
<tr>
<td>MCH S 52a</td>
<td>Elem Machine Shop</td>
</tr>
</tbody>
</table>

**Other Suggested Courses**

- AUTO 56a Auto Body Repair (3)
- AUTO 59 Auto Air Conditioning (2)
- AUTO 104 Auto Maint/Safety (6)
- approved English (3)
- MATH 54 Industrial Math (3)
- WELD 53b Beginning Arc Welding (3) or WELD 71 Intro Arc Welding (2)
- W EXP 50 Coop Work Exp Educ (4)

## AUTOMATIC TRANSMISSION CERTIFICATE PROGRAM

**Minimum units required – 24**

**Required Courses (Minimum of 18 units)**

<table>
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<tr>
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<tr>
<td>AUTO 105</td>
<td>Auto Transmission Serv</td>
</tr>
<tr>
<td>AUTO 111</td>
<td>Tuneup/Emissions Control</td>
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**Electives (Minimum of 6 units)**

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<tbody>
<tr>
<td>AUTO 64</td>
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<tr>
<td>MCH S 1</td>
<td>Machine Metalworking</td>
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<tr>
<td>OR</td>
<td>OR</td>
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<tr>
<td>MCH S 52a</td>
<td>Elem Machine Shop</td>
</tr>
</tbody>
</table>

**Other Suggested Courses**

- AUTO 57 Parts Sales/Mngmnt (2)
- AUTO 74 Disc/Brake Drum Srv (2)
- AUTO 102a Automotive Engines (12)
- approved English (3)
- approved mathematics (3)
- PHIL 53ab Work Ethics (3)
- W EXP 50 Coop Work Exp Educ (4)

## AUTO ENGINE OVERHAUL CERTIFICATE PROGRAM

**Minimum units required – 38**

**Required Courses (Minimum of 34 units)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 102a</td>
<td>Automotive Engines</td>
</tr>
<tr>
<td>AUTO 111</td>
<td>Tuneup/Emissions Control</td>
</tr>
</tbody>
</table>

**Electives (Minimum of 4 units)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 62</td>
<td>Automatic Transmission</td>
</tr>
<tr>
<td>WELD 1</td>
<td>Intr Oxy-Acet Weldg</td>
</tr>
<tr>
<td>OR</td>
<td>OR</td>
</tr>
<tr>
<td>WELD 70</td>
<td>Intr Oxy-Acet Weldg</td>
</tr>
</tbody>
</table>

**Other Suggested Courses**

- AUTO 57 Parts Sales/Mngmnt (2)
- AUTO 73 Wheel/Frame Alignmnt (2)
- AUTO 74 Disc/Brake Drum Srv (2)
- approved English (3)
- approved mathematics (3)
- PHIL 53ab Work Ethics (3)
- W EXP 50 Coop Work Exp Educ (4)

## AUTO TUNE-UP AND EMISSION CONTROL CERTIFICATE PROGRAM

**Minimum units required – 30**

**Required Courses (24 units)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 102a</td>
<td>Automotive Engines</td>
</tr>
<tr>
<td>AUTO 111</td>
<td>Tuneup/Emissions Control</td>
</tr>
</tbody>
</table>

**Electives (Minimum of 6 units)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 1</td>
<td>Intr Oxy-Acet Weldg</td>
</tr>
<tr>
<td>OR</td>
<td>OR</td>
</tr>
<tr>
<td>WELD 70</td>
<td>Intr Oxy-Acet Weldg</td>
</tr>
</tbody>
</table>

**Other Suggested Courses**

- AUTO 57 Parts Sales/Mngmnt (2)
- AUTO 73 Wheel/Frame Alignmnt (2)
- approved English (3)
- approved mathematics (3)
- PHIL 53ab Work Ethics (3)
- W EXP 50 Coop Work Exp Educ (4)
### Cabinetmaking Certificate Program

**Minimum units required — 36**

**Required Courses (Minimum of 27 units)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOOD 1</td>
<td>Basic Wood Working</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD 2</td>
<td>Machine Woodworking</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD 55</td>
<td>Intr Cabint/Furn Mkg</td>
<td>6.0</td>
</tr>
<tr>
<td>WOOD 65a</td>
<td>Adv Cabint/Furn Mkg</td>
<td>6.0</td>
</tr>
<tr>
<td>WOOD 65b</td>
<td>Adv Cabint/Furn Mkg</td>
<td>6.0</td>
</tr>
<tr>
<td>WOOD 52a</td>
<td>El Cabinet/Furn Mkg</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Electives (Minimum of 9 units)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN DR 30a</td>
<td>Industrial Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH</td>
<td>Approved Course</td>
<td>3.0</td>
</tr>
<tr>
<td>W EXP 50</td>
<td>Coop Wrk Expr Educ</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Other Suggested Courses**

- BUS 52 Business Wrld Today (3)
- BUS 58 Human Relat/Motivat (3)
- BUS 71a Leadership/Mgt Trm (1-4)
- approved English (3)
- MATH A Elementary Algebra (3)
- MATH B Geometry (3)
- PHIL 53ab Work Ethics (3)

### Electronics Technology Certificate Program

**Minimum units required — 34**

**Required Courses (34 units)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE T 54a</td>
<td>Fund of Electricity</td>
<td>4.0</td>
</tr>
<tr>
<td>ELE T 54b</td>
<td>Fund of Electricity</td>
<td>4.0</td>
</tr>
<tr>
<td>ELE T 59a</td>
<td>Semicond Circ Analy</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH 53a</td>
<td>Beg Math/Electronics</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 53b</td>
<td>Adv Math/Electronics</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 54a</td>
<td>Commun Elecronics</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Other Suggested Courses**

- ELE T 55 Electro Mech Devices (4)
- ELE T 67 Microwave Commun (3)
- MATH 53c Calc for Electronics (3)
- MATH 53d Calc for Electronics (3)
- PHYSC 11a College Physics (4)
- PHYSC 11b College Physics (4)
- ENGL approved course (3)
- PHIL 53ab Work Ethics (3)

### Computer Aided Manufacturing Certificate Program

**Minimum units required — 29**

**Required Courses (Minimum of 19 units)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MET 1</td>
<td>General Metal</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH S 1</td>
<td>Machine Metalworking</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCH S 52a</td>
<td>Elem Machine Shop</td>
<td>2.0</td>
</tr>
<tr>
<td>MCH S 53b</td>
<td>Intrmd Machine Shop</td>
<td>2.0</td>
</tr>
<tr>
<td>MCH S 54a</td>
<td>Blprnt Wldrs Mchnst</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Electives (Minimum of 10 units)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH B</td>
<td>Geometry</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH C</td>
<td>or 200C Trigonometry</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH S 53c</td>
<td>Intrmd Machine Shop</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH S 52c</td>
<td>Intrmd Machine Shop</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH S 52d</td>
<td>Adv Machine Shop</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**Other Suggested Courses**

- MCH S 53d Adv Machine Shop (3)
- WELD 53d Beginng Arc Welding (3)
- MATH Approved Course (3)
- IN DR 30a Industrial Drawing (3)
- WELD 71 Intro Arc Welding (2)
- W EXP 50 Coop Work Expr Educ (4)
- MCH S 2 Prgmng/Numr Cntrl (3)

### Machine Tool Metalworking Certificate Program

**Minimum units required — 34**

**Courses may only be counted in one group.**

**Required Courses (Minimum of 22 units)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MET 1</td>
<td>General Metal</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH S 1</td>
<td>Machine Metalworking</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCH S 52a</td>
<td>Elem Machine Shop</td>
<td>2.0</td>
</tr>
<tr>
<td>MCH S 53b</td>
<td>Intrmd Machine Shop</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH S 52c</td>
<td>Adv Machine Shop</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**Electives (Minimum of 12 units)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCH S 53d</td>
<td>Adv Machine Shop</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 53d</td>
<td>Beginng Arc Welding</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH</td>
<td>Approved Course</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 30a</td>
<td>Industrial Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>W EXP 50</td>
<td>Coop Work Expr Educ</td>
<td>4.0</td>
</tr>
</tbody>
</table>

132
Other Suggested Courses

- MATH C Plane Trigonometry (3)
- ENGR 45 Prop of Materials (3)
- MCH S 3 Num Con lathe/Mchns (3)
- MCH S Num Cntrl Progrmng (3)
- MCH S 5 Adv Num Con Progrm (3)
- ART 3ab Basic Design (3)
- ART 3cd 3 Dimensional Design (3)
- WELD 77 Indust Metallurgy (2)

MCH S 90 will satisfy the following subjects: MCH S 1, 53b, 53c, 53d.

PETROLEUM TECHNOLOGY

This program is a cooperative effort of Bakersfield College and Taft College/WESTEC facility. It is designed to provide general knowledge of the petroleum industry and to prepare students for immediate employment.

Minimum units required — 24-25

Required Courses of All Students — 13 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN UN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET T 59</td>
<td>Oilfield Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>PET T 80</td>
<td>Safety/Fire Prevent</td>
<td>2.0</td>
</tr>
<tr>
<td>PET T 81</td>
<td>Oilfield Regs/Leg Req</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Other Required Courses for Specialty in DRILLING — 11 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN UN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET T 52</td>
<td>Petro Explr/Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>PET T 60</td>
<td>Intr Drilling Fluids</td>
<td>3.0</td>
</tr>
<tr>
<td>PET T 71</td>
<td>Intr Drl/Well Comp</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Other Required Courses for Specialty in WORKOVER — 11 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN UN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET T 60</td>
<td>Intr Drilling Fluids</td>
<td>3.0</td>
</tr>
<tr>
<td>PET T 73</td>
<td>Prod Prac/Downhole</td>
<td>3.0</td>
</tr>
<tr>
<td>PET T 75</td>
<td>Well Serv/Workover</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Other Required Courses for Specialty in PRODUCTION — 11 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN UN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET T 54</td>
<td>Petro Prod Prac</td>
<td>3.0</td>
</tr>
<tr>
<td>PET T 56</td>
<td>Secondary Recovery</td>
<td>3.0</td>
</tr>
<tr>
<td>PET T 73</td>
<td>Prod Prac/Downhole</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Other Required Courses for Specialty in TECHNICAL STUDIES — 12 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN UN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET T 52</td>
<td>Petro Explr/Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>PET T 55</td>
<td>Corrosn Cntrol Meas</td>
<td>3.0</td>
</tr>
</tbody>
</table>

*Courses offered at Taft College/WESTEC.

SURVEYING CERTIFICATE PROGRAM

Minimum units required — 24

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV 61</td>
<td>Surveying Math</td>
<td>4.0</td>
</tr>
<tr>
<td>SURV 62</td>
<td>Surveying Practices</td>
<td>4.0</td>
</tr>
<tr>
<td>SURV 63</td>
<td>Traverse Surveying</td>
<td>4.0</td>
</tr>
<tr>
<td>SURV 64</td>
<td>Highway Curves</td>
<td>4.0</td>
</tr>
</tbody>
</table>

WELDING CERTIFICATE PROGRAM

Minimum units required — 35

Required Courses (Minimum of 23 units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 1</td>
<td>Intr Oxy-Acet Weldg</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td>WELD 65b Adv Arc Welding</td>
<td>5.0</td>
</tr>
<tr>
<td>WELD 70</td>
<td>Intr Oxy-Acet Weldg</td>
<td>2.0</td>
</tr>
<tr>
<td>OR</td>
<td>WELD 73 Maint/Repair Weldg</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD 71</td>
<td>Intro Arc Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD 65a</td>
<td>Adv Arc Welding</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Electives (Minimum of 12 units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 75</td>
<td>Adv Oxy-Acet Weldg</td>
<td>2.0</td>
</tr>
<tr>
<td>OR</td>
<td>MCH S 52b Intrmd Machine Shop</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD 76</td>
<td>Qualif/Certificat</td>
<td>2.0</td>
</tr>
<tr>
<td>OR</td>
<td>MCH S 54b Blprnt/Layout Wldrs</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD 77</td>
<td>Industr Metallurgy</td>
<td>2.0</td>
</tr>
<tr>
<td>OR</td>
<td>MCH S 54a Blprnt/Laywldrs</td>
<td>2.0</td>
</tr>
<tr>
<td>MCH S 1</td>
<td>Machine Metalworking</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td>MCH S 52a Elem Machine Shop</td>
<td>2.0</td>
</tr>
<tr>
<td>MCH S 53b</td>
<td>Intrmd Machine Shop</td>
<td>3.0</td>
</tr>
</tbody>
</table>

ASSOCIATE DEGREE PROGRAMS

Students are encouraged to continue their training and education beyond the Certificate of Achievement by taking additional technical-related courses and general education courses which may lead to an Associate of Science or Associate of Arts Degree.

Students must comply with the requirements as shown in the catalog under Graduation Requirements. Counselors/advisors will assist the student in planning for an Associate degree.

 erupted 133
ASSOCIATE OF SCIENCE DEGREE PROGRAMS

AERONAUTICS

Minimum units required in related discipline — 31

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>UN</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AERO 2 Basic Ground School</td>
<td>3.0</td>
<td>AERO 8 Adv Grnd Schl Cmcl</td>
</tr>
<tr>
<td>AERO 3 Aviation Weather</td>
<td>3.0</td>
<td>MATH D Intermed Algebra</td>
</tr>
<tr>
<td>AERO 4 Instrument Grnd Trng</td>
<td>3.0</td>
<td>AERO 6b instrmt Inflight Trg</td>
</tr>
<tr>
<td>AERO 7 Air Traf Cntrl Pred</td>
<td>3.0</td>
<td>PHYSC 2a General Physics</td>
</tr>
<tr>
<td>AERO 6a Primary Inflight Trg</td>
<td>2.0</td>
<td>PHYSC 2b General Physics</td>
</tr>
</tbody>
</table>

AUTOMOTIVE TECHNOLOGY

Minimum units required in discipline — 48

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>UN</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 111 Tuneup/Emiss Cntrol</td>
<td>12.0</td>
<td>AUTO 105 Auto Transmiss Serv</td>
</tr>
<tr>
<td>AUTO 103 Auto Transmiss Serv</td>
<td>6.0</td>
<td>AUTO 109 Auto Power Trains</td>
</tr>
<tr>
<td>AUTO 108 Auto Steer/Suspens</td>
<td>6.0</td>
<td>AUTO 102a Automotive Engines</td>
</tr>
</tbody>
</table>

ELECTRONICS TECHNOLOGY

Minimum units required in discipline — 41

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>UN</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 53a Beg Math/Electronics</td>
<td>3.0</td>
<td>ELE T 59b Digital Electronics</td>
</tr>
<tr>
<td>ELE T 54a Fund of Electricity</td>
<td>4.0</td>
<td>ELE T 66a Communic Electronics</td>
</tr>
<tr>
<td>ELE T 54b Fund of Electricity</td>
<td>4.0</td>
<td>ELE T 66b Communic Electronics</td>
</tr>
<tr>
<td>ELE T 59a Semicond Circ Analy</td>
<td>4.0</td>
<td>ELE T 67 Microwave Communic</td>
</tr>
<tr>
<td>MATH 53b Adv Math/Electronics</td>
<td>3.0</td>
<td>ELE T 68 Microprocessors</td>
</tr>
<tr>
<td>ELE T 55 Electro Mech Devices</td>
<td>4.0</td>
<td></td>
</tr>
</tbody>
</table>

Other Suggested Courses
MATH 53c Calc for Electronics (3), MATH 53d Calc for Electronics (3).

MACHINE TOOL METALWORKING

Minimum units required in discipline — 32

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>UN</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>METAL 1 General Metal</td>
<td>3.0</td>
<td>MCH S 2 Prgrmg/Numr Cntrl</td>
</tr>
<tr>
<td>MCH S 1 Machine Metalworking</td>
<td>3.0</td>
<td>MCH S 53c Intrmd Machine Shop</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td>OR</td>
</tr>
<tr>
<td>MCH S 52a Elem Machine Shop</td>
<td>2.0</td>
<td>MCH S 52c Intrmd Machine Shop</td>
</tr>
<tr>
<td>WELD 1 Intr Oxy-Acet Weldg</td>
<td>3.0</td>
<td>MCH S 3 Num Con Lathe/Mchns</td>
</tr>
<tr>
<td>OR</td>
<td>IN DR 30a Industrial Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 70 Intr Oxy-Acet Weldg</td>
<td>2.0</td>
<td>MCH S 53d Adv Machine Shop</td>
</tr>
<tr>
<td>MEC T 54a Blprtnt Wldrs Mchnst</td>
<td>3.0</td>
<td>MCH S 52d Adv Machine Shop</td>
</tr>
<tr>
<td>MCH S 53b Intrmd Machine Shop</td>
<td>3.0</td>
<td>MCH S 4 Num Cntrl Prgrmg</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td>OR</td>
</tr>
<tr>
<td>MCH S 52b Intrmd Machine Shop</td>
<td>2.0</td>
<td>WELD 77 Industr Metallurgy</td>
</tr>
<tr>
<td>WELD 53b Beginng Arc Welding</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>

PETROLEUM TECHNOLOGY

This program is a cooperative effort of Bakersfield College and Taft College/WESTEC facility.

Minimum units required in discipline — 34

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>UN</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>PET T 59 Oilfld Mathematics</td>
<td>3.0</td>
<td>PET T 54L* Petro Prod Prac Lab</td>
</tr>
<tr>
<td>PET T 73 Prod Prac/Downhole</td>
<td>3.0</td>
<td>OR</td>
</tr>
<tr>
<td>PET T 80 Safety/Fire Prevntn</td>
<td>2.0</td>
<td>PET T 54x* Prod Prac-Surf Lab</td>
</tr>
<tr>
<td>PET T 82 Oilfield Science</td>
<td>3.0</td>
<td>PET T 71* Intr Drl/Well Comp</td>
</tr>
<tr>
<td>PET T 52 Petro Explr/Geology</td>
<td>3.0</td>
<td>PET T 71L* Drl/Well Compl Lab</td>
</tr>
<tr>
<td>PET T 81 Oilfld Regs/Leg Req</td>
<td>3.0</td>
<td>OR</td>
</tr>
<tr>
<td>PET T 70* Petro Fundmntls Lab</td>
<td>2.0</td>
<td>PET T 71x* Adv Drl/Well Lab</td>
</tr>
<tr>
<td>PET T 54* Petro Prod Prac</td>
<td>3.0</td>
<td>PET T 75* Well Serv/Workover</td>
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<tr>
<td>PET T 75L* Well Serv/Wkvr Lab</td>
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<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td>PET T 75x* Adv Well Serv Lab</td>
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</tbody>
</table>

*Courses offered at Taft College/WESTEC.
<table>
<thead>
<tr>
<th>APPR</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>52A</td>
<td>RESID ELEC TRAINEE 3.0</td>
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</tr>
<tr>
<td>54</td>
<td>Floorcovering</td>
<td>2.0</td>
</tr>
<tr>
<td>55</td>
<td>Carpentry</td>
<td>2.0</td>
</tr>
<tr>
<td>56</td>
<td>Operating Engineers</td>
<td>3.0</td>
</tr>
<tr>
<td>57</td>
<td>Brick/Tile Layers</td>
<td>2.0</td>
</tr>
<tr>
<td>58</td>
<td>Pntng/Dctng/Papmg</td>
<td>2.0</td>
</tr>
<tr>
<td>59</td>
<td>Plasterers/Cmt Mas</td>
<td>2.0</td>
</tr>
<tr>
<td>60</td>
<td>Electricity</td>
<td>4.0</td>
</tr>
<tr>
<td>60a</td>
<td>Lineman/Electrician</td>
<td>2.0</td>
</tr>
<tr>
<td>60b</td>
<td>Lineman/Electrician</td>
<td>2.0</td>
</tr>
<tr>
<td>60c</td>
<td>Lineman/Electrician</td>
<td>2.0</td>
</tr>
<tr>
<td>60d</td>
<td>Lineman/Electrician</td>
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</tr>
<tr>
<td>60e</td>
<td>Lineman/Electrician</td>
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<tr>
<td>60f</td>
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<tr>
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<td>54</td>
<td>CPR/Electricians</td>
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<tr>
<td>60xa</td>
<td>Conduit Bending yr 3</td>
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<tr>
<td>60xb</td>
<td>Conduit Bending yr 4</td>
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<tr>
<td>60xc</td>
<td>Electr CPR</td>
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<tr>
<td>60xd</td>
<td>Pole Top Safety</td>
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<tr>
<td>60xe</td>
<td>Conduit Bending yr 3</td>
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<tr>
<td>61</td>
<td>Surveying Practices</td>
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<tr>
<td>62</td>
<td>Roofing</td>
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<tr>
<td>63a</td>
<td>Hydroel Pnt Op Mn</td>
<td>9.0</td>
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<tr>
<td>63b</td>
<td>Hydroel Pnt Op Mn</td>
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<tr>
<td>63c</td>
<td>Intmd Hydroel Op I</td>
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<tr>
<td>63d</td>
<td>Intmd Hydroel Op II</td>
<td>6.0</td>
</tr>
<tr>
<td>63e</td>
<td>Adv Opr Hydroel Plt</td>
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</tr>
<tr>
<td>63s</td>
<td>Hydroel Pnt Op Mn</td>
<td>2.0</td>
</tr>
<tr>
<td>65</td>
<td>Plumbing/Pipefitting</td>
<td>2.0</td>
</tr>
<tr>
<td>67</td>
<td>Sheet Metal</td>
<td>2.0</td>
</tr>
<tr>
<td>60XF</td>
<td>FIRST AID CPR ELECTRICIAN</td>
<td></td>
</tr>
<tr>
<td>63W</td>
<td>Wall Tr P/Opr Cl I</td>
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</tr>
</tbody>
</table>

**AERONAUTICS (AERO)**

1 Unit 3 hrs x 7 wks
WELDING TECHNOLOGY

Minimum units required in discipline — 38

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 1</td>
<td>Intr Oxy-Acet Wldg</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WELD 70</td>
<td>Intr Oxy-Acet Wldg</td>
<td>2.0</td>
</tr>
<tr>
<td>MCH S 1</td>
<td>Machine Metalworking</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 53b</td>
<td>Beginning Arc Welding</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCH S 52a</td>
<td>Elem Machine Shop</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD 71</td>
<td>Intro Arc Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD 65a</td>
<td>Adv Arc Welding</td>
<td>5.0</td>
</tr>
<tr>
<td>METAL 1</td>
<td>General Metal</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH T 54a</td>
<td>Bprnt Wldrs Mchnst</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 53c</td>
<td>Intrmd Arc Welding</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WELD 74</td>
<td>Tig and Mig Welding</td>
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</tr>
<tr>
<td>WELD 72a</td>
<td>Advanced Arc Weldg</td>
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</tr>
</tbody>
</table>

WOODWORKING TECHNOLOGY

Minimum units required in discipline — 39

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOOD 1</td>
<td>Basic Wood Working</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD 2</td>
<td>Machine Woodworking</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 30a</td>
<td>Industrial Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD 55</td>
<td>Int Cabinet/Furn Mkg</td>
<td>6.0</td>
</tr>
<tr>
<td>IN DR 30b</td>
<td>Industrial Drawing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUGGESTED TRANSFER PROGRAMS

Since requirements vary, the current catalog of the chosen college or university should be consulted for specific requirements of the chosen field.

These suggested programs will meet most of the lower division requirements at California State Universities/Colleges as well as fulfilling all the requirements for the associate degree from Bakersfield College.

ELECTRONICS TECHNOLOGY

Designed to enter the electronics industry at the technician level.

State Universities/Colleges

Required Courses in Major

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE T 54ab</td>
<td>Fund of Electricity</td>
<td>8.0</td>
</tr>
<tr>
<td>ELE T 55</td>
<td>Electro Mech Devices</td>
<td>4.0</td>
</tr>
<tr>
<td>ELE T 59a</td>
<td>Semicond Circ Analy</td>
<td>4.0</td>
</tr>
<tr>
<td>ELE T 66ab</td>
<td>Communnic Electronics</td>
<td>7.0</td>
</tr>
<tr>
<td>ELE T 67</td>
<td>Microwave Communic</td>
<td>3.0</td>
</tr>
</tbody>
</table>

INDUSTRIAL ARTS

Industrial Arts majors in state universities/colleges are planned to provide for professional careers in teaching, and business. The degree is the Bachelor of Arts with a major in Industrial Arts.

California State University, Fresno

Required Courses in Major

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 1</td>
<td>Basic Auto</td>
<td>3.0</td>
</tr>
<tr>
<td>ELE T 1</td>
<td>Basic Electricity</td>
<td>3.0</td>
</tr>
<tr>
<td>METAL 1</td>
<td>General Metal</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD 1</td>
<td>Basic Woodworking</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Consult other college catalogs for requirements leading to the Bachelor degree with an Industrial Arts major.

INDUSTRIAL TECHNOLOGY

Designed for students who wish to work toward a Bachelor of Science degree in Industrial Technology as offered by many state universities/colleges. Graduates from this major find employment in a broad range of professional positions in industrial management, industrial production, or industrial marketing. For those interested in employment in industry, the course offerings qualify students for positions that work closely with engineering and business.

California State University, Fresno

Required Courses in Major

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2a</td>
<td>Intro Gen Chemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>ECON 1</td>
<td>Prin Econo-Micro</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON 2</td>
<td>Prin Econo-Macro</td>
<td>3.0</td>
</tr>
<tr>
<td>ELE T 1</td>
<td>Basic Electricity</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 30a</td>
<td>Industrial Drawing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Majors in Industrial Technology may choose manufacturing industries option or construction option to complete the Bachelor of Science degree at California State University, Fresno. Refer to their catalog for specific requirements.
APPRENTICESHIP PROGRAMS

Apprenticeship courses are designed for apprentices actively employed in the fields and indentured under the Shelley-Maloney California Apprenticeship Standards Act. The Apprentice Agreement states that the student will supplement on-the-job training with related classroom instruction each year of his or her apprenticeship.

Apprentice classes meet three to six hours per week and yield two to six units of credit. Joint Apprenticeship Committees administering each program are composed of representation from labor, management, California State Division of Apprenticeship Standards, and Bakersfield College. These committees adopt state approved standards for operation and include equal opportunity for applicants. Related training in apprenticeable occupations, in addition to those listed below, may be offered as the need arises.

Information for entry into these apprenticeship programs may be obtained from the college coordinator of apprenticeship training. All interested persons may apply for any of these programs.

- Brick/Tile Layers
- Operating Engineers
- Carpentry
- Painting/Decorating/Papering
- Electricians
- Plasterers/Cement Masons
- Floorcovering
- Plumbing/Pipefitting
- Hydroelectric Plant Operations and Maintenance
- Roofing
- Inside Wireman/Electricity
- Sheet Metal
- Surveying

ASSOCIATE DEGREE PROGRAM

Apprenticeship classes for duration of apprentice period (24 units maximum) 12-24

Work Experience (four semesters, maximum of 16 units) 8-16

Related technical subjects as recommended by JAC (if needed) 0-6

In addition, students must comply with the requirements as shown in the catalog under Graduation Requirements. The departmental counselor can assist the student in planning for the A.A. degree.

CERTIFICATE PROGRAM

Apprenticeship classes for duration of apprentice period 12-24

Work Experience 16

Electives (as recommended by JAC) to reach 30 units total (if needed).

COURSE DESCRIPTIONS

AERONAUTICS (AERO)

- 1 GENERAL AERONAUTICS (3 units)

  Three hours lecture.
  Prerequisite: None.

  An introductory course that shows the student how aviation affects the individual directly and indirectly. The student will gain understanding of the part aviation plays in the national economy and world transportation system. The student will learn how aircraft are designed and constructed to meet each purpose for which aircraft are used. The course will also introduce the student to current methods used to fly and navigate aircraft. The student will gain understanding of all phases of aviation.

- 2 BASIC GROUND SCHOOL (3 units)

  Three hours lecture.
  Prerequisite: None.

  A basic study of the Federal Aviation Regulations for pilots, navigation, principles of flight, radio communication, safe aircraft and engine operation. Meets the requirements of the FAA approved Basic Ground School for the private pilots' certificate.

3 AVIATION WEATHER (3 units)

  Three hours lecture.
  Prerequisite: None.

  An introductory course that gives the theory of weather, the course includes the composition of the atmosphere, the formation and movement of air mass systems and basic circulation patterns. The course will also include the dynamics of cloud formation, stability of the atmosphere and local weather patterns. The course demonstrates the effects of weather on the lives of individuals, particularly the aviators. The student will learn to read and interpret weather charts and reports such as those broadcast and displayed by radio, TV, weather stations and flight service stations. The student will gain insight on the current theory of the science of weather modification.

4 INSTRUMENT GROUND TRAINING (3 units)

  Three hours lecture.
  Prerequisite: AERO 2 or background in aviation.

  Covers the areas of aeronautical knowledge as it pertains to the instrument pilot. Includes the procedures for aircraft navigation and control through the use of radio navigation facilities, instruments, interpretation and landing approach procedures using ADF, ILS, VOR, GCA, DME and radar facilities. Also shows air traffic control procedures.
• 6a PRIMARY IN-FLIGHT TRAINING (2 units)
Two hours lecture.
Prerequisite: None. AERO 2 and 3 may be taken concurrently.
Lecture explains all maneuvers and qualifications needed to become a private pilot. Students will make individual arrangements with a flight school for in-flight training.

• 6b INSTRUMENT IN-FLIGHT TRAINING (2 units)
Two hours lecture.
Prerequisite: Private pilot certificate. AERO 3 and 4 may be taken concurrently.
Lecture explains all maneuvers and qualifications needed to become an instrument rated pilot. Students will make individual arrangements with a flight school for in-flight training.

6c COMMERCIAL FLIGHT TRAINING (4 units)
Two hours lecture.
Prerequisite: FAA Second Class medical certificate. AERO 1 and 3 may be taken concurrently.
Advanced in-flight training to meet the Federal Aviation Agency flight requirements for the Commercial Pilot certificate. Students will make individual arrangements with FAA approved flight school for in-flight time.

• 7 AIR TRAFFIC CONTROL PROCEDURES (3 units)
Three hours lecture.
Prerequisite: None.
How to stay out of trouble with the FAA. Designed to teach the student how to operate comfortably in today's complex airspace. Will emphasize operations in radar environments to include TCA's, TRSA's, PCA's and other radar environments.

• 8 ADVANCED GROUND SCHOOL (COMMERCIAL PILOT) (3 units)
Three hours lecture.
Prerequisite: AERO 2 or equivalent knowledge.
To teach the student advanced aircraft systems and performance associated with today's modern aircraft. The student will also gain a more complete knowledge of Federal Aviation Regulations and Air Traffic Control to enable him/her to pass the FAA Commercial Pilot Airplane written exam.

10 FLIGHT INSTRUCTOR REFRESHER CLINIC (1.5 units)
Twenty-four hours lecture.
Prerequisite: Flight instructor's certificate or participating in flight training to become a flight instructor.
Designed to keep the flight instructor or flight instructor trainee abreast of the latest procedures and information being stressed by industry and the FAA. The course also is designed to enhance aviation safety by training flight instructors to be more aware of accident prone areas and situations. The course covers areas such as weather, airspace, teaching procedures, stalls, etc., and will be updated annually to reflect current training emphasis.

11 PILOT REFRESHER CLINIC (0.5 unit)
Twelve hours lecture.
Prerequisite: Student must possess a Student Pilot or higher certificate.
Course designed to refresh pilots on the latest information, methods and techniques in aviation. The information contained in this highly concentrated course will by necessity be varied with each presentation. The course will comply with the oral requirements of the flight review required by Federal Aviation Regulations, Part 61.57, of all pilots.

AIR CONDITIONING and REFRIGERATION (AC RF)
54a—54b AIR CONDITIONING AND REFRIGERATION
(54a: 3—3 units; 54b: 3—3 units)
One hour lecture and six hours laboratory.
Prerequisite: AC RF 54a: MATH 54 or equivalent (may be taken concurrently). ELE T 1 or 52a—52b, or 54a or equivalent, or evaluation by instructor. 54b: AC RF 54a or equivalent.
Principles of refrigeration and air conditioning applied to domestic and commercial systems. Repair and maintenance of equipment.

APPLIANCE REPAIR (APL R)
52a—52b APPLIANCE REPAIR
(52a: 3—3 units; 52b: 3—3 units)
Two hours lecture, four hours demonstration/laboratory.
Prerequisite: An interest in the job opportunities available in the field of appliance service and repair, or current related employment.
Operations, service and repair of home appliances. 52a includes clothes washers, dryers, stoves, hot water heaters. 52b includes dish washers, refrigerators, freezers, garbage disposals, rubbish compacters, etc. Training includes understanding and application of basic principles of electricity and characteristics of natural and liquified petroleum gases as required to properly service current appliance applications.
1 BASIC AUTO (3 units)

Two hours lecture and four hours laboratory/demonstration.
Prerequisite: None.
An introduction to the general mechanical concepts and related physical principles of the automobile and its component parts. Study will stress the automobile as the primary mode of transportation in contemporary American culture with special emphasis on the effects of the automobile and automotive industry on the national economy and the environment. Students will learn how components of the automobile function, the diagnosis of common problems and the repair of defective components and systems. Course will meet the transfer core requirements for Industrial Arts and Industrial Technology Majors.

56a—56b AUTO BODY REPAIR (3—3 units)

One hour lecture and six hours laboratory.
Prerequisites: WELD 1 or WELD 70 (may be taken concurrently). WELD 1 and AUTO 56a prerequisite to AUTO 56b.
Repairing and refinishing of auto bodies. Provides technical information and manipulative experience in the basic techniques, tools of the trade and procedures as used in the auto body and paint shops. Recommended for auto majors who have an interest in entering automotive insurance appraisal work.

56c—56d ADVANCED AUTO BODY REPAIR (3—3 units)

One hour lecture and six hours laboratory.
Prerequisite: AUTO 56b is prerequisite to AUTO 56c. AUTO 56c is prerequisite to AUTO 56d.
Deals with major rebuilding and refinishing of auto bodies. Provides technical information and manipulative experience in the more advanced techniques and procedures involved in repairing major body damage and complete refinishing problems. Includes advanced spray painting techniques, materials and procedures with emphasis on production shop tools and methods. This is an advanced course and requires the student to develop skills acceptable for job entry in the trade.

57 PARTS SALES AND MANAGEMENT (2 units)

Three hours lecture.
Prerequisite: None. Automotive or similar experience is desirable.
Provides training that will enable the student to work as a parts man in wholesale and retail parts departments. Parts selling and parts department management is a major objective of the course.

59 AUTOMOTIVE AIR CONDITIONING (2 units)

One hour lecture and two hours laboratory/demonstration.
Prerequisite: AUTO 1 or equivalent.
Study of the principles and theory of automotive air conditioning systems. Laboratory practice in the installation, service and repair of automotive air conditioning.
62 AUTOMATIC TRANSMISSIONS (2 units)

Three hours lecture.
Prerequisite: None. Trade experience helpful.
Develops an understanding of the design and operating principle of automatic transmissions. Provides actual work experiences in the servicing and maintenance of automatic transmissions.

63 AUTO CARBURETION (2 units)

Three hours lecture.
Prerequisite: AUTO 1 or one year of high school auto shop or trade experience.
Theory and servicing of automotive fuel system components including theory of manifolding.

64 AUTOMOTIVE ELECTRIC SYSTEMS (2 units)

Three hours lecture.
Prerequisite: AUTO 1 or one year of high school auto shop or trade experience.
Repair and adjustment of automotive electrical equipment. Operation of precision test equipment as used in major auto repair shops.

65 AUTOMOTIVE EMISSION CONTROL DEVICES (2 units)

Two hours lecture/demonstration and one hour laboratory.
Prerequisite: AUTO 1 or equivalent.
Designed to give the student the needed technical knowledge and skills to service all types of crankcase ventilating devices, exhaust emission control systems and vapor control systems. The laws controlling emission on all automobiles in California. How to troubleshoot these systems and to use equipment necessary to test for emission valves. Designed to give the student the necessary knowledge to pass the California State Class A Smog Test.

73 WHEEL AND FRAME ALIGNMENT (2 units)

One hour lecture, two hours demonstration/laboratory.
Prerequisite: None.
Designed for those actively engaged in the wheel and frame aligning area of the automotive repair industry. The course will cover effects, factors, specifications, influences and adjustments of correct and incorrect installations.

74 AUTOMOTIVE DISC AND DRUM BRAKE SERVICE (2 units)

One hour lecture, two hours demonstration/laboratory.
Prerequisite: None.
Designed primarily for the person who wants to learn about brake service in the automotive repair industry.

75 AUTOMOTIVE ENGINE THEORY AND OVERHAUL PROCEDURES (3—3 units)

Three hours lecture, three hours laboratory.
Prerequisite: High school automotive, AUTO 1 or trade experience.
Theory of internal combustion, piston type engine design. Component by component analysis of common wear areas and trouble spots. Live work practice in engine overhaul procedures, repair techniques and machining operations.

90 AUTOMOTIVE MAINTENANCE AND REPAIR (3—12 units)

Twenty-five hours per week lecture, demonstration and hands-on practice. Open entry/open exit.
Prerequisites: Minimum of eighth grade level in reading and math; enrollment in the Bakersfield College Employers' Training Resource program and concurrent enrollment in IND E 90.
Designed to give students entry-level skills in the area of engine component service, chassis service, brake service, air conditioning service and basic engine tune-up.

102a AUTOMOTIVE ENGINES (12 units)

Twenty hours per week for eighteen weeks.
Prerequisite: AUTO 1 with a grade of "C" or higher or one year of high school auto with a grade of "B" or higher.
Practical shop experience involving automotive engine repair and maintenance operations.

102b AUTOMOTIVE ENGINES MACHINING (12 units)

Twenty hours per week for eighteen weeks.
Prerequisites: AUTO 102a, 109 and 107.
Practical shop experience involving automotive engine machining, repair and operations.

103 BRAKES—AUTOMOBILES AND TRUCKS (6 units)

Twenty hours per week for nine weeks.
Prerequisite: One year high school auto shop or working in automotive trade.
A specialized study of brake systems, hydraulic, vacuum and air.

• 106 AUTO EMISSION CONTROL DEVICES AND RELATED TUNE-UP (6 units)

Twenty hours per week for nine weeks.
Prerequisite: AUTO 1 or equivalent.
Designed to give the student the needed technical knowledge and skills to service all types of crankcase ventilating devices, exhaust emission control systems and vapor control systems. Students who complete this course should be able to obtain their California State Class "A" Smog License.
107a AUTO BODY REPAIR AND REFINISHING (12 units)

Twenty hours per week for eighteen weeks.
Prerequisite: WELD 1 or WELD 70 (may be taken concurrently)
Lectures and demonstrations given under "live" conditions in the laboratory. Provides both theory and assigned job tasks related to that which will be required for employment and/or advancement.

107b ADVANCED AUTO BODY REPAIR AND REFINISHING (12 units)

Twenty hours a week for eighteen weeks.
Prerequisites: AUTO 107a and WELD 1 or WELD 70.
Provides both theory and practice in job related tasks.

108 AUTOMOTIVE SUSPENSION, STEERING AND ALIGNMENT (6 units)

Twenty hours per week for nine weeks.
Prerequisite: WELD 1 (may be taken concurrently), one year high school auto shop or working in automotive trade.
Automotive suspension, steering and alignment.

110 AUTOMOTIVE AIR CONDITIONING (6 units)

Twenty hours per week for nine weeks.
Prerequisite: AUTO 1 or equivalent.
A study of the principles and theory of automotive air conditioning systems. Laboratory practice in the installation, service and repair of automotive air conditioning.

111 AUTOMOTIVE TUNE-UP AND EMISSION CONTROL (12 units)

Twenty hours per week.
Prerequisite: High school automotive or AUTO 1.
Theory of the design, operation and practice in servicing of automotive electrical equipment and fuel systems. Includes: tune-up procedures; starting, charging and fuel systems diagnosis and repair; fuel injection, turbo-charger and computerized systems. All emission control devices, operation, testing and repair are covered to an extent which should enable the student to pass the California State Installer/Adjuster examination.

112 AUTOMOTIVE TRANSMISSIONS AND POWER TRAINS SERVICE (12 units)

Eight hours lecture, 12 hours laboratory.
Prerequisite: High school-automotive, AUTO 1 or permission of instructor.
Theory of the design, operation and practice in servicing of automotive drive train components and systems. Includes automatic trains and transaxles, standard transmissions and transaxles, clutches, "U" joints, and differentials and all related components. All transmissions, standard and automatic, are covered to the extent which should enable the student to pass the National Institute of Service Excellence test. (Formerly AUTO 105 and 109.)
ELECTRICAL TECHNOLOGY (ELE T)

1 BASIC ELECTRICITY (3 units)

Three hours lecture and three hours laboratory. 
Prerequisite: None.
An introductory course for non-electricity/electro-machinery majors designed to provide the student with a basic background in electricity/electronics. Discussion will include the effects of readily available electrical power and the electronics revolution upon modern society. Topics include DC and AC circuits, magnetic circuits, sources of power, measuring instruments, and electrical machines. This course helps the student to understand the interaction of modern technology and society. Will meet the transfer core program requirements for industrial arts teaching and industrial technology majors whose area of concentration is not electricity/electronics.

53 INTRODUCTION TO DIGITAL LOGIC (4 units)

Three hours lecture and three hours laboratory. 
Prerequisites: ELE T 54a and MATH 53a (May be taken concurrently).
Presents the basic principles of Digital Logic Circuit Analysis at the gate level. The course will utilize TTL and CMOS integrated circuits.

54a—54b FUNDAMENTALS OF ELECTRICITY (4—4 units)

Three hours lecture and three hours laboratory. 
Prerequisites: 54a prerequisite to 54b. MATH 53a must be taken concurrently with 54a, MATH 53b with 54b. 
Consideration is given to DC and AC circuits. An introductory course for students without previous work in electricity.

55 ELECTRICAL MACHINES AND ELECTRO-MECHANICAL DEVICES (4 units)

Three hours lecture and three hours laboratory. 
Prerequisites: A grade of "C" or higher in ELE T 54a and 54b and MATH 53a and 53b. 
This course covers the basic principles of design and construction, operation characteristics, efficiency and application of direct and alternating current machines, and electro-mechanical control devices. Field trips required.

57 ELECTRONIC FABRICATION (3 units)

Two hours lecture and four hours laboratory. 
Prerequisites: MATH 53a, 53b and ELE T 54a and 54b. 
Deals with the design and fabrication of electronic equipment. A power supply will be constructed using the guidelines outlined in the text.

59a SEMICONDUCTOR CIRCUIT ANALYSIS (4 units)

Three hours lecture and three hours laboratory. 
Prerequisites: MATH 53a; ELE T 54a or equivalent background in electronics. 
Presents the basic principles of analysis and design of transistor circuits; includes bipolar transistors, field effect transistors, and linear integrated circuits.

59b DIGITAL ELECTRONICS (4 units)

Three hours lecture and three hours laboratory. 
Prerequisite: ELE T 59a. 
Presents the basic principles of non-linear circuit analysis. Considered will be pulse, logic and other non-linear circuits. A large portion of laboratory time is devoted to work with logic trainers.

66a COMMUNICATIONS ELECTRONICS (4 units)

Three hours lecture and three hours laboratory. 
Prerequisites: MATH 53a—53b and ELE T 54a—54b. 
Designed to prepare students for F.C.C. examinations (second class telephone license), for positions in broadcast stations and in other electronics fields. Field trips required.

66b COMMUNICATIONS ELECTRONICS (4 units)

Three hours lecture and three hours laboratory. 
Prerequisite: ELE T 66a. 
Designed to prepare students for F.C.C. examinations (second class telephone license), for positions in broadcast stations and in other electronics fields. Field trips required.

67 MICROWAVE COMMUNICATIONS (3 units)

Two hours lecture and four hours laboratory. 
Prerequisite: ELE T 66b (may be taken concurrently). 
Theory of microwave behavior and modes of transmission are tested. Laboratory work involves measurements and circuitry concepts.

68 MICROPROCESSOR BASED MICROCOMPUTER TECHNOLOGY (4 units)

Three hours lecture and three hours laboratory. 
Prerequisite: ELE T 59b or ELE T 58 or a working understanding of digital logic and application knowledge of TTL devices.
Investigation and analysis of a microprocessor based microcomputer. Students will program and interface individual machine language microcomputer trainers.
MATH 53a BEGINNING MATHEMATICS FOR ELECTRONICS (3 units)

Three hours lecture.
Prerequisite: One year of high school algebra or equivalent.
Basic mathematics for electrical and electronics majors. Course includes the use of the scientific electronic calculator, first degree equations, special products and factoring, fractional equations, simultaneous equations, exponents, radicals, Thevenin's theorem, and Norton's theorem.

MATH 53b ADVANCED MATHEMATICS FOR ELECTRONICS (3 units)

Three hours lecture.
Prerequisite: MATH 53a or equivalent.
Course includes trigonometry, periodic functions, vector algebra, quadratic equations, logarithms, number systems for computers, and the solutions of series and parallel A.C. circuits.

MATH 53c—53d CALCULUS FOR ELECTRONICS (3—3 units)

Three hours lecture.
Prerequisites: A grade of "C" or higher in MATH 53b. Grade of "C" or higher in 53c prerequisite to 53d.
Designed primarily for electronics and electrical technology majors to provide an introduction to the calculus and the fundamental mathematics of circuit analysis. Emphasizes fundamental concepts rather than a high degree of mathematical proficiency.

INDUSTRIAL EDUCATION (IND E)

51 MOTORCYCLE REPAIR AND MAINTENANCE (3—3 units)

Two hours lecture and four hours demonstration/laboratory.
Prerequisite: None.
Provides theory and practice in a wide variety of motorcycle repair applications with emphasis on the two and four stroke cycle engines. Areas to be covered include engine design and operations, diagnosis, tune-up, brake, clutches, transmissions, electrical systems, fuel systems, frame construction, preventative maintenance and basic shop operations and principles. ( Formerly IND E 50a—50b.)

53 SMALL ENGINE REPAIR (2—2 units)

One and one-half hours lecture/demonstration and one and one-half hours laboratory.
Prerequisite: None.
Provides theory and practice in a wide variety of small engine repair and maintenance. Types of engines to include lawn mower, edger, generators, compressors, chain saws, etc. Areas to be covered include engine design and operations, diagnosis, tune-up, electrical systems, fuel systems, preventative maintenance and basic shop operations and maintenance. (Formerly IND E 50a—50b.)

MACHINE SHOP (MCH S)

1 ELEMENTARY MACHINE METALWORKING (3 units)

Two hours lecture/demonstration and four hours laboratory.
Prerequisite: None.
An introductory machine metalworking class designed to develop skills in the design, planning, and construction of projects using various metals. Included in this course will be the study of three dimensional design, and the operation of metal lathes, milling machines, shaper, drill press and grinders. Practice is also provided in the use of hand tools and precision measuring instruments.

2 INTRODUCTION TO NUMERICAL CONTROL AND FUNDAMENTALS OF PROGRAMMING (3 units)

Three hours lecture.
Prerequisite: Two semesters of machine shop or equivalent experience in the machine trade.
An introduction to numerical control of machines and basic programming for machine operation. The course will include a brief history of N.C., machine tools, drive units, C.N.C., and basic programming of machine tools.

80 TOPICS IN INDUSTRIAL EDUCATION (0.5—3 units)

Eighteen hours lecture/demonstration per unit.
Concentrates on current topics in industrial education areas. Some of the topics are: diesel fundamentals and advanced diesel, diesel electronics, auto refrigeration. Other topics may be considered, as appropriate.

81 SPECIAL PROBLEMS IN INDUSTRIAL EDUCATION (1—3 units Limit 9 units)

Eighteen hours of student participation per one unit of credit.
Prerequisite: A minimum of six (6) units completed in the area of concentration of the special problem assignment.
Designed to provide special and advanced studies not covered by regular course offerings to individual students. Special problems can be assigned in each area of concentration in the departmental curriculum such as Aeronautics, Automotive, Electronics, Machine Tool Metalworking, Solar, Welding, etc.

90 OCCUPATIONAL READINESS (3—16 units)

Fifty-four to two hundred eighty-eight hours lecture/laboratory. Open entry/open exit.
Prerequisites: Eighth grade reading and math level; concurrent enrollment in one of the following: Auto 90, AGRIC 90, MCH S 90, WELD 90.
Designed to provide students with the survival skills necessary to be successful in their occupational objective. The course is made up of communication, computation and job survival skills. The units on computation and communication are geared toward the use of these skills on the job. The job survival skills include procedures and processes of securing a job, getting along on the job and work ethics.
3 COMPUTER NUMERICAL CONTROL LATHE AND MACHINING CENTER OPERATION (3—3 units)

Two hours lecture and four hours laboratory.
Prerequisite: MCH S 2 with a grade of “C” or higher.
Set-up and operation of the machine tools including; manual data input, tool offsets, control unit operation, tool selection, tool set-up, measurement, editing, tape punch, turret positioning and tool changer operation. Nine weeks will be spent on lathe operation and nine weeks on machining center operation.

4 NUMERICAL CONTROL PROGRAMMING (3—3 units)

Three hours lecture and one hour laboratory.
Prerequisite: MCH S 3 with a grade of “C” or higher.
A computer language using English like characters to convert part geometry and cutter path into a format acceptible to the computer. Programs will be written and proofed on a plotter prior to punching a machine tape to operate a CNC lathe or machining center.

5 ADVANCED NUMERICAL CONTROL PROGRAMMING (3—3 units)

Three hours lecture and one hour laboratory.
Prerequisite: MCH S 4 with a grade of “C” or higher.
Covers advanced geometrical definitions, repetitive programming and non-geometric surfaces. Advanced tape operation of the CNC lathe and machining center with tool changer will also be covered.

52a ELEMENTARY MACHINE SHOP (2 units)

Two hours lecture/demonstration and one hour laboratory.
Prerequisite: None.
A study of the lathe, milling machine, drill press, grinding machines, hand tools and precision measuring instruments.

52b—52c INTERMEDIATE MACHINE SHOP (2—2 units)

Two hours lecture/demonstration and one hour laboratory.
Prerequisite: MCH S 1 or 52a.
Continued instruction on lathes, shapers, milling machines, grinding machines, hand tools and precision measuring instruments.

52d ADVANCED MACHINE SHOP (2 units)

Two hours lecture/demonstration and one hour laboratory.
Prerequisite: MCH S 52c.
Advanced instruction in job related skills for employment or advancement in the machine tool metalworking industry or for satisfaction of a student’s individual achievement goals in metal working techniques.

53b INTERMEDIATE MACHINE SHOP (3 units)

Two hours lecture/demonstration and four hours laboratory.
Prerequisite: MCH S 1.
A study of machine tool metalworking procedures including the operation of the lathe, milling machine, shaper, drill press and grinder. Practice is provided in the use of hand tools and measuring instruments. Metal casting and foundry practices are studied.

53c INTERMEDIATE MACHINE SHOP (3 units)

Two hours lecture/demonstration and four hours laboratory.
Prerequisite: MCH S 53b.
Instruction in machine tool operation including the lathe, milling machine, shaper, grinders, precision measuring instruments and hand tools.

53d ADVANCED MACHINE SHOP (3 units)

Two hours lecture/demonstration and four hours laboratory.
Prerequisite: MCH S 53c.
Advanced instruction in job related skills for employment or advancement in the machine tool metalworking industry or for satisfaction of a student’s individual achievement goals in metal working techniques.

68a—68b VOCATIONAL MACHINE SHOP (8—8 units)

Four hours lecture/demonstration and eleven hours laboratory.
Prerequisite: MCH S 53b.
Advanced machine shop for the vocational machine trades students. Additional experience is provided at a technical level for the students who have had basic preparation in machine tool operation, layout, moulding and casting.

90 MACHINE TOOL AND METALWORKING (12 units)

Twenty-five hours lecture/laboratory. Open entry/open exit.
Prerequisite: Eighth grade reading level.
Basic safety is reflected in all instruction and is an on-going process throughout the four month program. The course is designed for those students interested in pursuing the machine trade for employment.

MECHANICAL TECHNOLOGY (MEC T)

54a BLUEPRINT READING FOR WELDERS AND MACHINISTS (3 units)

Three hours lecture.
Prerequisite: Basic welding or machine shop knowledge.
Designed to familiarize students with the principles of blueprint reading as it applies to the welding and machine trades. Emphasis will be placed on the ability to visualize and interpret working drawings. Welding symbols and basic shop math will also be covered.
54b BLUEPRINT READING AND LAYOUT FOR WELDERS (3 units)

Three hours lecture.
Prerequisite: MEC T 54a.
Designed to familiarize students with intermediate blueprint reading and layout. Pipe fittings, pipe layout, and template development will be the central thrust of the class.

59a BASIC HYDRAULICS/FLUID MECHANICS (3 units)

Three hours lecture.
Prerequisite: None.
An orientation to mobile and industrial hydraulic systems as a means of power transmission. Provides an identification of terms, laws, theory, components and systems used in this general locality along with their function, performance and problems in trouble shooting and maintenance. Designed to provide material on which a beginner can base his/her hydraulic education and an experienced mechanic can refresh his/her learning.

59b ADVANCED BASIC HYDRAULICS/FLUID MECHANICS (3 units)

Three hours lecture.
Prerequisite: MEC T 59a recommended or knowledge of hydraulic fundamentals gained from experience.
A practical approach to the understanding of advanced technical material concerning modern hydraulic systems. Concentrates on trouble shooting techniques, develops speed and skill in repair and maintenance.

59c HYDRAULICS/FLUID MECHANICS — DIAGNOSIS AND REPAIR (3 units)

Three hours lecture.
Prerequisite: MEC T 59b.
Trouble shooting, diagnosis and repair of mobile and industrial systems. Provides information and techniques useful in solving problems and eliminating their causes in hydraulic systems pertinent to this locality. Designed to provide material with which an experienced hydraulics mechanic or a student with a background in the field of hydraulics can add to his/her education.

METAL

1 GENERAL METAL (3 units)

Two hours lecture/demonstration and four hours laboratory.
Prerequisite: None.
An introductory course designed to study the fundamental techniques and processes involved in the design and construction of metal projects including the study of three dimensional design, the care and use of hand tools, familiarization with common metals and practice in metal working processes. Fundamentals of metal casting, forging, heat treatment, machining, and sheet metal working are presented.

PETROLEUM TECHNOLOGY (PET T)

52 PETROLEUM EXPLORATION AND GEOLOGY (3 units)

Three hours lecture/discussion.
Prerequisite: None.
A general study of geology as a mechanism for defining the structure formation of the earth's crust, and its use in determining the location of oil bearing sands in the petroleum industry. Structural formation of the earth's crust and its use in the study of petroleum production. Field trips to local oil fields required.

53 INTRODUCTION TO PRODUCTION OPERATIONS (2 units)

Two hours lecture/discussion.
Prerequisite: None.
Student will learn basic practices and equipment in the petroleum industry pertaining to daily operating procedure, including the components of a well, pumping mechanisms, special problems and treatments, storage and separation, enhanced recovery, laws, and employment opportunities.

54 PETROLEUM PRODUCTION PRACTICES (3 units)

Three hours lecture/discussion.
Prerequisite: Concurrent enrollment in PET T 54L or 54x recommended.
A study covering the functions of various types of equipment and techniques used in the producing of oil.

54L* PETROLEUM PRODUCTION PRACTICES LAB (2 units)

Six hours laboratory.
Prerequisites: PH ED 31a, PET T 80 or evaluation by instructor. Concurrent enrollment in PET T 54 recommended.
Designed to provide a hands-on approach to the basic functions of hydrocarbon processing equipment. Emphasis will be on safe operations, common oilfield surface facilities and solving common problems in the oilfield. Field trips required.

54x* PETROLEUM PRODUCTION PRACTICES, SURFACE LAB (1 unit)

Three hours laboratory.
Prerequisites: PH ED 31a, PET T 80, three years work experience in oilfield, or evaluation by instructor. Concurrent enrollment in PET T 54 recommended.
Designed to provide hands-on training in the basic functions of hydrocarbon processing equipment. Emphasis will be on safe operations, common oilfield surface facilities, and solving common oilfield problems. Closely parallels PET T 54L but with less emphasis on fundamental skills. Designed for those who have previous work experience in the oilfield.

*Courses offered at Taft College/WESTEC.
55 CORROSION CONTROL MEASURES (3 units)

Three hours lecture/discussion.
Prerequisite: None.
An outline of the scope of corrosion and corrosion control measures as practiced in the petroleum industry. Basic chemistry, electro-chemistry, electricity, and metallurgical factors as they relate to corrosion control are explored. The use of cathodic protection, coatings, chemical inhibitors, and materials design factors are investigated. (Formerly PET T 52.)

56 SECONDARY RECOVERY (3 units)

Three hours lecture/discussion.
Prerequisite: None.
Designed to develop an understanding of the water and steam flooding techniques in the production of oil. Emulsion, gas injection, and insitu combustion methods will be discussed.

57 WELL COMPLETIONS, WORKOVERS, AND STIMULTIONS (3 units)

Three hours lecture/discussion.
Prerequisite: None.
An outline of basic well completion methods taking into account the reservoir conditions as well as the mechanical equipment. An outline of well testing and subsequent identification of problem wells—and how to cope with them. Stimulation to improve well productivity will be studied as a part of the completion process. Deals predominantly with remedial measures taken in order to deal with formation damage, gas control, water shut-off, sand control, and similar well problems (Formerly PET T 56.)

58 BASIC ELECTRICITY AND INSTRUMENTATION (3 units)

Three hours lecture/discussion.
Prerequisite: None.
Basic principles and practices used in the petroleum industry for the application of electricity and automatic controls, including automation methods used for testing and shipping of petroleum products. Emphasis on application of design and operation.

59 PRACTICAL OILFIELD MATHEMATICS (3 units)

Three hours lecture/discussion.
Prerequisite: None.
Designed as a review of fundamental mathematics required for the non-technical employee involved in oil and gas production or pipeline and plant operations. Emphasizes application of mathematics to everyday problems in field work. (Formerly PET T 55.)

60 INTRODUCTION TO DRILLING FLUIDS (3 units)

Three hours lecture/discussion/laboratory.
Prerequisite: None.
A study of the physical and chemical properties of water base drilling fluids. The effect these properties have on hydraulics and manipulation of these properties. An analysis of contaminates and well bore problems as related to drilling fluids will be conducted. Practical experience in testing procedures will be acquired in laboratory experiments. (Formerly PET T 57.)

61 INSTRUMENTATION (2 units)

Two hours lecture/discussion.
Prerequisite: None.
The student will learn basic principles and practices used in the petroleum industry for the application of automatic controls, including automation methods used for producing, processing, testing and shipping of petroleum products. Emphasis will be placed on application of design and operation of controls. (Formerly PET T 60.)

62 SINGLE PASS STEAM GENERATORS (2 units)

Two hours lecture.
Prerequisite: None.
A course of instruction to teach the basic principles and practices used in the application of single pass steam generators. Emphasis will be placed on design, operation, controls, trouble shooting and application.

63 FUNDAMENTALS OF WATERFLOODES (2 units)

Two hours lecture.
Prerequisite: None.
The student will learn the fundamentals of the Petroleum Industry including the geology of oil, exploration and drilling procedures, production practices, transportation and refining.

65 FUNDAMENTALS OF THE PETROLEUM INDUSTRY (2 units)

Two hours lecture.
Prerequisite: None.
The student will learn the fundamentals of the Petroleum Industry including the geology of oil, exploration and drilling procedures, production practices, transportation and refining.

67 PETROLEUM FUNDAMENTALS LAB (2 units)

Six hours laboratory.
Prerequisite: None.
Will promote an understanding of the various areas of technology involved in the petroleum industry. Areas explored will be land acquisition, geology, drilling, well servicing, production, transportation, and refining. Field trips required.

71* INTRODUCTION TO DRILLING AND WELL COMPLETION (3 units)

Three hours lecture.
Prerequisite: Concurrent enrollment in PET T 71L or 71x recommended.
An introductory course designed to familiarize the petroleum technology student with the equipment and practices employed in the drilling and well completion phases of hydrocarbon production.

*Courses offered at Taft College/WESTEC.
71L* DRILLING AND WELL COMPLETION LAB (2 units)

Six hours laboratory.
Prerequisites: PH ED 31a, PET T 80, or evaluation by instructor. Concurrent enrollment in PET T 71 recommended.

Designed to provide the petroleum technology student with practical experience in the techniques of drilling and well completions.

71x* ADVANCED DRILLING AND WELL COMPLETION LAB (1 unit)

Three hours laboratory.
Prerequisites: PH ED 31a, PET T 80, three years of work experience in the oilfield, or evaluation by instructor. Concurrent enrollment in PET T 71 recommended.

Designed to provide the petroleum technology student with practical experience in the techniques of drilling and well completion. Closely parallels PET T 71L but with less emphasis on fundamental skills. Designed for those who have previous work experience in the oilfield.

73 PETROLEUM PRODUCTION PRACTICES: DOWNSHOLE (3 units)

Three hours lecture/discussion.
Prerequisite: None.

Designed to provide the student with a knowledge base of considerations involving various lifting methods, reservoir stimulation, reservoir characteristics, and troubleshooting parameters.

75* WELL SERVICING AND WORKOVER (3 units)

Three hours lecture/discussion.
Prerequisite: Concurrent enrollment in PET T 75L recommended.

Covers basic well servicing, workover operations, and the tools utilized in those procedures. Emphasis will be on common problems encountered, safe practices and on an overall understanding of well servicing work.

75L* WELL SERVICING AND WORKOVER LAB (2 units)

Six hours laboratory.
Prerequisites: PH ED 31a, PET T 80, or evaluation by instructor. Concurrent enrollment in PET T 75 recommended.

Well servicing and workover operations will be practiced on a production rig using the tools and methods covered by classroom lecture. Emphasis will be on safe work practices, equipment operation, and hands-on experience in well servicing procedures. Field trips required.

75x* ADVANCED WELL SERVICING AND WORKOVER LAB (1 unit)

Three hours laboratory.
Prerequisites: PH ED 31a, PET T 80, three years of work experience in the oilfield, or evaluation by instructor. Concurrent enrollment in PET T 75 recommended.

Well servicing and workover operations will be practiced on a production rig using the tools and methods described in the classroom lecture. Emphasis will be on safe work practices, equipment operation, and hands-on experience in well servicing procedures. Closely parallels PET T 75L but with less emphasis on fundamental skills. Designed for those who have previous work experience in the oilfield.

80 PETROLEUM SAFETY AND FIRE PREVENTION (2 units)

Two hours lecture.
Prerequisite: None.

Designed to provide the petroleum technology student with the safety and fire prevention orientation required of those working in the production and processing of hydrocarbons.

81 OILFIELD REGULATION AND LEGAL REQUIREMENTS (3 units)

Three hours lecture/discussion.
Prerequisite: None.

Designed to familiarize the student with various regulatory agencies and the legal requirements which they place upon oilfield development and operation. Emphasizes how these regulations affect daily activities and what precautions can be taken to prevent conflicts.

82 OILFIELD SCIENCE (3 units)

Three hours lecture/discussion.
Prerequisites: Eligibility for MATH D or PET T 59 (may be taken concurrently).

Oriented toward the application of scientific principles with respect to oilfield operation. Designed to give the student a practical knowledge of the principals of physics, chemistry, mechanics, strength of materials, and thermodynamics as they apply in day-to-day oilfield situations.

83 ADVANCED DRILLING PRACTICES (3 units)

Three hours lecture/discussion.
Prerequisites: PET T 59, 71, 71L or 71x, 82 or evaluation by instructor.

An in-depth look at modern drilling practices and the problems that may be encountered during the drilling phase of a well. Emphasis will be on the technical and economic aspects of drilling.

*Courses offered at Taft College/WESTEC.
Three hours lecture.
Prerequisite: PET T 65 recommended.
Basic elements of petroleum reservoirs including geology, reservoir mechanics, recovery techniques, calculating reserves, and plotting and maintaining reservoir data will be included in the course. Some previous experience or knowledge of oilfield operations would be helpful. (Formerly PET T 82.)

90a—z PETROLEUM TECHNOLOGY SPECIAL TOPICS (0.5—3 units)
Minimum of eight hours lecture/seminar per 0.5 unit.
Prerequisite: None.
A series of workshop/seminar sessions devoted to instruction in specialized topics pertinent to the oil industry. Topics may include basic petroleum technology, corrosion control, drilling, energy conservation, management, production, reservoir and geology, safety, sales and marketing, well control and workover, as well as other special programs as the need arises. Features speakers or panels of specialists from the petroleum industry who have expertise in the particular subject area. (Formerly PET T 70a—z.)

*Courses offered at Taft College/WESTEC.

SOLAR

1 SOLAR HEATING AND COOLING OF RESIDENTIAL BUILDINGS (3 units)
Three hours lecture.
Prerequisite: None.
Includes the fundamental operating characteristics of several types of solar energy systems, the availability of solar radiation, fundamentals of system sizing and selection and practical energy conservation measures.

2 SOLAR ENERGY SYSTEM INSTALLATION PROCEDURES (3 units)
Two hours lecture and four hours laboratory.
Prerequisite: None.
Designed to train students in the basic skills required to properly and safely install and test various solar domestic hot water systems on residential buildings.

3 PASSIVE SOLAR TECHNIQUES AND SIZING (3 units)
Three hours lecture.
Prerequisite: None.
Designed to present the fundamental concepts of passive solar design and application in new and retrofit situations.

SURVEYING (SURV)

61 SURVEYING MATHEMATICS (4 units)
Three hours lecture and three hours laboratory.
Prerequisites: High school algebra, geometry, and trigonometry or equivalent.
Application of trigonometric functions and the solution of triangles to surveying. Use of the slide rule and surveying tables including interpolation and logarithms. Surveying problems applied to line direction coordinates, circular curves and calculations.

62 SURVEYING PRACTICES (4 units)
Three hours lecture and three hours laboratory.
Prerequisite: SURV 61 or equivalent.
Designed to teach the student sights and signals, plumbing and eccentric, accuracy and theory of errors, field notes and descriptions, linear measurements and leveling, angular measurements and reference points.

63 TRAVERSE SURVEYING (4 units)
Three hours lecture and three hours laboratory.
Prerequisite: SURV 61 or equivalent.
Traverse surveys, open, closed, deflection angles, azimuth, compass, interior angle, and angles-to-the-right. Checking traverses in field, traverse computations, error latitudes and departures, compass rule and transit rule applications, balancing a survey, plotting area computations, electronic surveys and construction surveys.

64 HIGHWAY CURVES (4 units)
Three hours lecture and three hours laboratory.
Prerequisites: Surveying mathematics or equivalent and three semesters of surveying courses.
Circular, vertical and spiral curves, super elevation, highway construction surveys, public relations and research for survey data as applied to surveying.

65 TOPOGRAPHIC SURVEYING (4 units)
Three hours lecture and three hours laboratory.
Prerequisite: SURV 61 or equivalent.
Stadia surveying, topographic, architectural, hydrographic and photogrammetric surveys. Instrument adjustment.

66 CONTROL SURVEYING (4 units)
Three hours lecture and three hours laboratory.
Prerequisite: SURV 61 or equivalent.
Practical astronomy, construction surveys, property surveys and laws affecting the surveyor.
67 LAND SURVEYING (4 units)
Three hours lecture and three hours laboratory.
Prerequisite: SURV 61 or equivalent.
U.S. public land surveys, triangulation and trilateration, plane coordinate system.

68 WRITING LEGAL SURVEYING DESCRIPTIONS (4 units)
Three hours lecture and three hours laboratory.
Prerequisite: Survey mathematics or equivalent and three semesters of surveying courses.
Writing legal descriptions, records search, fundamentals, control, boundaries, monuments, streets, easements, title guarantees, survey plats, professional status.

69 LAND SURVEYOR'S REVIEW COURSE (3 units)
Three hours lecture.
Prerequisite: A minimum of 12 units from SURV 61 through SURV 68 or appropriate field experience.
Application of topics from SURV 61 through SURV 68 as preparation for taking Land Surveyor's License Exam. Selected questions from past Land Surveyor's Review Exams will be used to gauge whether students are prepared to take the examination.

WELDING
(WELD)

1 INTRODUCTORY OXY - ACETYLENE WELDING (3 units)
Two hours lecture/demonstration and four hours laboratory.
Prerequisite: None.
Practical welding experience in oxygen acetylene welding. A study of metals and their physical properties for welding. Welding, brazing, silver soldering and gas cutting of steel. Eighteen weeks of oxy-acetylene welding and cutting satisfies pre-vocational requirements for Welding Technology.

53b BEGINNING ARC WELDING (3 units)
Two hours lecture and four hours laboratory.
Prerequisite: None.
Designed to develop an understanding of basic arc welding theory and manipulative skills relating to the Shielded Metal Arc Welding process. This includes the welding of typical joints in all positions.

53c INTERMEDIATE ARC WELDING (3 units)
Two hours lecture/demonstration and four hours laboratory.
Prerequisite: WELD 53b with a grade of "C" or higher.
A follow-up course to WELD 53b to advance the skills of the beginning welder. More advanced welding techniques with an emphasis on developing the skills required of out-of-position welding.

65a-65b ADVANCED WELDING (5—5 units)
Two hours lecture and eight hours laboratory.
Prerequisite: WELD 53b with a grade of "C" or higher prerequisite to 65a. 65a prerequisite to 65b.
Advanced welding techniques. Special attention will be given to the skills required to successfully complete the structural plate and pipe welding qualifications tests. Both the theory and practice of gas metal arc welding, and gas tungsten arc welding of mild steel, aluminum and stainless steel will be presented.

70 INTRODUCTORY OXYGEN-ACETYLENE WELDING (2—2 units)
One hour lecture and two hours demonstration/laboratory.
Prerequisite: None.
Practical welding experience in oxygen-acetylene welding, gas and cutting techniques, silver brazing and silver soldering on ferrous and non-ferrous metals.

71 INTRODUCTORY ARC WELDING (2—2 units)
One hour lecture and two hours demonstration/laboratory.
Prerequisite: None.
Designed to develop an understanding of basic arc welding theory and manipulative skills relating to the Shielded Metal Arc Welding process. This includes the welding of typical joints in all positions.

72 ADVANCED ARC WELDING (2 units)
One hour lecture/demonstration and two hours laboratory. (May be repeated once.)
Prerequisite: WELD 53b or WELD 71 with a grade of "C" or higher.
Advanced welding techniques with special attention given to the skills required to successfully complete the structural plate and pipe welding qualifications test using shielded metal arc welding process.

73 MAINTENANCE AND REPAIR WELDING (2 units)
One hour lecture/demonstration and two hours laboratory.
Prerequisites: WELD 1 or WELD 70 and WELD 53b or WELD 71.
Includes welding and cutting operations related to the repair of cast iron, carbon steel, aluminum, stainless steel, and bronze. Some basic fundamentals in hardfacing worn surfaces will also be covered.

74 TIG AND MIG: A FUNDAMENTAL APPROACH
TO THE GAS SHIELDED ARC WELDING PROCESSES (2—2 units)
One hour lecture/demonstration and two hours laboratory.
Prerequisites: WELD 1 or WELD 70 and WELD 53b or WELD 71.
Includes theory and application of tungsten in gas and metal in gas welding. Emphasis will be placed on the proper operation of MIG and TIG while welding mild steel, aluminum, and stainless steel.
75 ADVANCED OXYGEN-ACETYLENE WELDING (2 units)
One hour lecture and two hours laboratory.
Prerequisite: WELD 1 or WELD 70.
Practical welding experience in oxy-acetylene welding and cutting techniques. Welding ferrous and non-ferrous metals. Making patterns and templates as used in the field.

76 WELDER QUALIFICATION AND CERTIFICATION (2 units)
One hour lecture/demonstration and two hours laboratory.
Prerequisite: WELD 53b or WELD 71, WELD 53c or WELD 72 with a grade of “C” or higher.
Designed to cover the requirements of various qualification tests such as the ASME, AWS, API, etc. Practical welding experience will be on plate and pipe that meet these code specifications.

77 INDUSTRIAL METALLURGY (2 units)
Two hours lecture.
Prerequisite: None.
Designed to explore the fundamentals of metallurgy as applied to metal welding and machine technology. Focus is on the theoretical and practical applications of metallurgy. Covers information required to choose the most appropriate metals for particular fabrication procedures. Also included will be the weldability, machineability, the physical, and mechanical properties of metals.

78 MIG AND RELATED GAS SHIELDED ARC WELDING PROCESSES (2 units)
One hour lecture/demonstration, two hours laboratory.
Prerequisite: WELD 53b, WELD 71 or permission of instructor.
Includes theory and application of MIG, flux-cored, and submerged arc welding. Focus is welding mild steel with the three processes. Aluminum and stainless steel will be welded with the MIG process.

79 WELDING INSPECTION (2 units)
Two hours lecture.
Prerequisite: None.
Includes material from theory and application of various codes and standards to the actual inspection process.

90 GENERAL WELDING (12 units)
Twenty-five hours lecture/laboratory.
Prerequisite: Eighth grade reading level.
Designed to provide students with the practical and theoretical skills necessary to obtain gainful employment in the welding industry. Course of instruction will include safe and proper application of varied welding processes, oxy-acetylene cutting, blue-print reading, weld inspection, and testing, layout and fabrication.

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- 1 BASIC WOODWORKING (3 units)

Two hours lecture and four hours laboratory.
Prerequisite: None.
An introductory hand tool woodworking course designed to develop skill in the planning, design, and construction of woodworking projects. Gives students an extensive exploration of wood as a medium with emphasis on the basic principles of three-dimensional design. Content includes basic woodworking processes including bending by lamination, finishing, carving and lathe turning. Will meet the transfer core program requirements for Industrial Arts teaching and Industrial Technology majors.
2 MACHINE WOODWORKING (3 units)
Two hours lecture/demonstration/discussion and four hours laboratory.
Prerequisite: None.
An introductory machine woodworking course designed to develop skill in the planning, design, and construction of woodworking projects. Gives students an extensive exploration of wood as a medium with emphasis on the basic principles of three-dimensional design. Content includes basic woodworking processes including construction, joinery, finishing, and the development of skill and safety in the use of woodworking machines.

52a ELEMENTARY CABINET AND FURNITURE MAKING (3 units)
Two hours lecture/demonstration and four hours laboratory.
Prerequisite: None.
A beginning machine woodworking course designed to develop skill in the use and care of woodworking machines to develop skill in planning and design, and to provide opportunities for practice of construction techniques.

55 INTERMEDIATE CABINET AND FURNITURE MAKING (6 units)
Four hours lecture/demonstration/discussion and six hours laboratory.
Prerequisite: WOOD 2 or 52a.
A follow-up course to WOOD 52a or 2, designed to advance the skills of the beginning student. More advanced planning and design of cabinets and furniture plus opportunities for additional practice of construction techniques.

65a ADVANCED CABINET AND FURNITURE MAKING (6 units)
Four hours lecture/demonstration/discussion and six hours laboratory.
Prerequisite: WOOD 55.
An advanced machine woodworking course designed to increase previously acquired skills by combining basic knowledge with new practices and procedures to gain new insight in machine operation, furniture design, joinery, construction and technology.

65b ADVANCED CABINET AND FURNITURE MAKING (6 units)
Four hours lecture/demonstration/discussion and six hours laboratory.
Prerequisite: WOOD 65a.
An advanced course to improve manipulative excellence in woodworking. Benefits to student will include original design, advanced problem solving, joinery methods, specialty setups on equipment and jig construction.

LIBRARY
Learning Center
Learning Skills
Reading

The Library is responsible for the traditional organized collections of print media and related services to readers. It also provides quiet study carrels, small group study areas, and a typing room.

LEARNING CENTER

The Learning Center, located in the west wing of the Library, provides the following services: self-paced mathematics and study skills courses, computer-assisted instruction, tutorial assistance, and media related to course work and other educational needs. Areas are available where students can review audio-visual materials or receive tutoring.

The Learning Center also offers various language and study skills courses to assist students in reaching their educational goals. For example, Learning Skills 101 or Learning Skills 201 is recommended to students who read at Level C on the Bakersfield College Placement Assessment, or who are classified Level C English and wish to enroll in English 60. Although students are encouraged to enroll at the beginning of the semester, they may enroll in the open-entry Learning Skills 201 for variable units throughout most of the semester. In addition, the short-term Learning Skills 70 series provide students reading at Level B or higher an opportunity to gain or improve study skills necessary to succeed in their other academic courses.

Students who have not met the reading proficiency requirements should take Reading 50 or Reading 62. Reading 1abc is open to Level A readers who wish to increase their reading speed.

COURSE DESCRIPTIONS

LEARNING SKILLS

70a-f STUDY SKILLS (0.5—3 units. Limit 3 units.)
Six hours lecture and three hours laboratory for each 0.5 unit.
Prerequisite: Reading at level B or above.
Students may take any or all of the six mini-courses offered. Each half-unit course is designed to give practical training in studying effectively for college classes. Topics: 70a—Time Management; 70b—Note-taking; 70c—Textbook Reading; 70d—Test Taking; 70e—Memory; 70f—Reasoning. (Credit/No Credit.)
101 COMMUNICATION SKILLS (0.5—3 units. Limit 3 units.)

Sixteen hours lecture/classwork and sixty-eight hours laboratory for three units OR eighteen hours laboratory for each half unit.

Prerequisite: None.

Provides prescriptive training in reading, spelling, writing, vocabulary development, listening, and study techniques. These skills will be enhanced by supervised repetition and practice within class and lab periods. Individual prescriptions may include a broad range of communication skills or be limited to specific problems such as spelling or punctuation. May be repeated once with permission of instructor. (Formerly LRN S 201.)

101h COMMUNICATION SKILLS (0.5—3 units)

Five hours lecture/laboratory for three units OR sixteen hours laboratory for each one-half unit.

Prerequisite: Open only to hearing impaired students.

The student will complete individually-prescribed work in spelling, reading, vocabulary development, study skills, survival skills, and/or English. Individual prescriptions may include a broad range of communication skills or be limited to specific problems such as spelling or punctuation. Formal lectures are included, and the instructor may award letter grades. Students may re-enroll three times as long as progress is demonstrated. (Formerly LRN S 201h.)

201 COMMUNICATION SKILLS (0.5—3 units. Limit 3 units per semester.)

Eighteen hours laboratory for each one-half unit on individual contract. May be taken four times with a limit of eight units of credit.

Prerequisite: None. Completion of LRN S 101 recommended.

Content will differ each time the student re-enrolls because he/she will complete individually-prescribed work in spelling, reading, vocabulary development, listening, study skills, and/or English. Any of these skills is enhanced by supervised repetition and practice in the laboratory. Individual prescriptions may include a broad range of communication skills or be limited to specific problems such as spelling or punctuation. Students will be graded credit/no credit. Open entry/open exit within a semester but not beyond a semester. (Formerly LRN S 201 a-d.)

READING (RDNG)

101abc SPEED READING (3 units)

1a—1b—1c (1—1—1) equivalent to 1abc.

Three hours lecture.

Prerequisite: Reading at level A, or evaluation by instructor.

Designed for students with above-average reading ability who wish to increase their reading speed and comprehension. Offered in six-week modules for one unit each or as a three unit semester class. 1a emphasizes speed, 1b emphasizes comprehension improvement, and 1c emphasizes vocabulary expansion. Laboratory practice required in class and outside of class.

50 READING FOR ACADEMIC SUCCESS (3 units)

Three hours lecture.

Prerequisite: Reading at level B or above or evaluation by the instructor.

Recommended for students who have not passed the reading proficiency test or those who wish to improve their skills in academic reading. Includes practice in skimming, scanning, outlining, summarizing, answering essay questions, short report writing from materials read, vocabulary building, and reading of textbooks and journals from academic and technical areas.

62 DEVELOPMENTAL READING (3 units)

Three hours lecture.

Prerequisite: Reading Level C with permission of instructor or Reading Level B. Recommended for students who need to improve reading comprehension, speed, and vocabulary. Includes practice in skimming, scanning, outlining, summarizing, and vocabulary building. Outside reading of fiction and non-fiction and book report writing are required.

72 Reading for Foreign & Bilingual Students (3 units)

Three hours lecture.

Prerequisite: None.

Covers problems of learning the English language with emphasis on the sound-system of English. Presents the Laubach Literacy method and materials, supplementary vocabulary lists and drills, teaching aids, and materials for review and reinforcement. Develops skills in writing high-interest literacy instruction. Introduces language problems of the exceptional student and the Laubach method of basic language skills instruction. Identical to TCH A 77c.
Students expecting to transfer to an upper division institution with a major in a Life Science area must comply with the requirements as shown in the catalog under Graduation Requirements and should consult the catalog of the college or university of their choice for required and/or recommended courses. Counselors/advisors will assist the student in planning for an Associate Degree.

**BACTERIOLOGY (Microbiology – Letters and Science)**

A bacteriologist studies growth, structure, development and general characteristics of bacteria and other microorganisms. Isolates and makes cultures of significant bacteria. Identifies microorganism by microscopic examination. Makes chemical analyses of substances such as enzymes, alcohols and acids produced by bacteria and other microorganisms.

**Required Courses**

- CHEM 1a General Chemistry 5.0
- CHEM 1b Gen Chem/Qual Anal 5.0
- CHEM 8 Organic Chemistry 3.0
- CHEM 9 Organic Chem lab 3.0
- CHEM 5 Quantitat Analysis 4.0

**Recommended Courses**

- BACT 2 Bacteriol-Microbiol French or German 4.0
- MATH 6a Analyt Geom Calc I 4.0
- PHYS 2ab General Physics 8.0

**ANATOMY (ANAT)**

- 1 HUMAN ANATOMY (4 units)
  - Two hours lecture and six hours laboratory.
  - Prerequisite: Satisfactory completion of a high school biology course with a laboratory or one semester of college biology.
  - The essential features of human anatomy with special emphasis upon the needs of students majoring in biology, nursing, physical education and the medical sciences. Includes the microscopic and gross anatomy of all the systems: skeletal, muscular, circulatory, respiratory, digestive, excretory, nervous, endocrine, reproductive and integumentary.

- 11 HUMAN ANATOMY (4 units)
  - Three hours lecture and three hours laboratory.
  - Prerequisite: An appropriate high school or college biology course with laboratory investigation.
  - Deals with the structure and function of the organ systems. Emphasizes the role of the mechanisms of organ system interaction and the effect of kinesthetics on normal body function. Lectures on and investigations into human morphology. Special emphasis for physical education majors.

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**BIOLOGY**

Biology is the study of the origin, relationship, development, anatomy, functions and other basic principles of animal and plant life. Graduates may specialize in research based on a particular animal, plant or aspect of biology. A wide variety of occupations is based on biological science. Major fields are biological oceanography, entomology, life science, teaching, botany, wildlife management, zoology and the clinical related fields.
BACTERIOLOGY
(BACT)

2 GENERAL BACTERIOLOGY AND MICROBIOLOGY (4 units)
Two hours lecture and six hours laboratory.
Prerequisite: CHEM 1a or 2a or 11.
Designed to meet the needs of biology, pre-nursing, health education, home economics and engineering students. Surveys: history, morphology and "place in nature" of the micro-organisms; effects of physical and chemical agents; biochemical activities; bacteria in relation to public health and immunity; industrial applications; further sanitation of food, water, sewage disposal, soil and air.

70 MEDICAL MICROBIOLOGY (2 units)
Two hours lecture.
Prerequisites: Medical laboratory registration, employment as a public school teacher. For registered medical technologists and teachers of health and biology. Surveys the areas of physiology of bacteria and immunology. Covers in sufficient depths the pathogenic bacteria, rickettsias, viruses and fungi.

BIOLOGY
(BIOL)

1a PRINCIPLES OF ANIMAL BIOLOGY (4 units)
Two hours lecture, six hours laboratory and one all-day field trip.
Prerequisite: One year of high school chemistry and biology.
An introductory course for students majoring in related biological sciences with emphasis on the science of animal life, the structure and function of organ systems and the survey of living animal groups.

1b PLANT BIOLOGY (4 units)
Two hours lecture, six hours laboratory and one all-day field trip.
Prerequisites: High school chemistry and biology.
An introduction to the fundamental principles of biology as illustrated by plants, followed by a survey of the plant kingdom. A basic course for all students of plant and animal science, forestry and agriculture.

1c PRINCIPLES OF CELLULAR BIOLOGY (4 units)
Three hours lecture, three hours laboratory and a one day field trip.
Prerequisites: CHEM 1a and either BIOL 1a or 1b.
A course for biology majors including topics common to plants and animals: biochemistry, cell structure and function, genetics, ecology and evolution.

10 INTRODUCTION TO BIOLOGICAL PRINCIPLES (3 units)
Three hours lecture. (Laboratory optional. See BIOL 10 L.)
Prerequisite: A qualifying score on the college aptitude test or "C's" in high school sciences or a "C" in BIOL 53.
An introductory course in biological principles for non-science majors and applicable as an introductory course for science majors, illustrating facts and principles of organization, function, heredity, ecology and evolution of living organisms.

10L BIOLOGICAL PRINCIPLES LABORATORY (1 unit)
Three hours laboratory.
Prerequisite: Completion of or concurrent enrollment in BIOL 10.
An optional laboratory to be taken concurrently with BIOL 10 if the student is in need of a laboratory science to fulfill general education requirements for transfer to another institution. The laboratory offers practical experience with living organisms and experience in the methods of science.

11 CONCEPTS OF BIOLOGY (4 units)
Three hours lecture and three hours demonstration/discussion/laboratory per week, plus at least one Saturday field trip.
Prerequisite: A qualifying score on a college aptitude test or "C's" in high school sciences or a "C" in BIOL 53.
An introductory course in biological science illustrating the principles of organization, function and evolution of plants and animals, with particular emphasis on man.

12 NATURAL HISTORY (3 units)
Two hours lecture and three hours laboratory. Several field trips will be scheduled during lab time and at least one Saturday field trip may be required.
Prerequisite: A basic course in college biology.
Lab and field work offers training and experience in the collection, identification and cataloging of plants and animals. Lectures stress basic principles of ecology, taxonomy and evolutionary relationship of organisms.

18 FIELD BOTANY (2 units)
One hour lecture and two hours laboratory.
Prerequisite: A basic course in biology.
Study of the key features of native plants in the field and in the laboratory. Emphasis will be given to the collection, identification and ecological relationships of the local flora. A minimum of two Saturday field trips is required.
• **21 SPECIAL PROJECTS IN BIOLOGY (1—2 units)**

  Two hours per week per unit. Field trips by arrangement.
  Prerequisite: A basic course in college biology.
  Biological preparations, laboratory apparatus and the development of specialized collection material under the direction of individual instructors. Designed for biology majors who plan to teach or wish to develop skills in laboratory demonstrations and biological collections.

• **22 NATURAL HISTORY OF THE MARINE ENVIRONMENT (3 units)**

  Thirty video programs and one all-day field trip.
  Prerequisite: None.
  A study of the unique features of the marine environment of the earth including life habitats, animals and plants, weather, mineral resources and pollution.

• **25 MICROBIOLOGY AND PATHOPHYSIOLOGY (5 units)**

  Three hours lecture and six hours laboratory.
  Prerequisites: ANAT 1, PHYS 1, CHEM 11 or equivalent, and NRSG 2 or equivalent (may be taken concurrently).
  Includes: taxonomy of microorganisms, common biochemical tests to differentiate microorganisms, laboratory testing and techniques of infectious agent identification, causes of disease, sources of infections, management and control of infectious disease, pathophysiology of systems, chemical metabolism and laboratory values, fluid and electrolyte balance, acid-base balance, toxicology, sterilization techniques and aseptic procedures, and medical genetics.

• **35a KERN COUNTY WILDFLOWERS (1 unit)**

  Eighteen hours of lecture/discussion/field trips.
  Prerequisite: None.
  Surveys the native wild flowers of Kern County by means of scheduled field trips into the local foothills and Kern River Canyon. Students will be introduced to basic floral characteristics, systems of classification, plant communities, life zones and ecological relationships. Techniques of collecting, pressing and display of plant specimens will be emphasized for possible use in the classroom at the elementary instructional level. The class will be of interest to both the beginning student and to those who have had previous training in wildflower study.

• **35b KERN COUNTY VERTEBRATE ANIMALS (1 unit)**

  Eighteen hours of lecture/discussion/field trips.
  Prerequisite: None.
  Provides a survey of the birds, mammals, reptiles and amphibians of Kern County by means of both scheduled field trips and by class discussion of the habits and distribution of these vertebrates. Emphasis will be given to the field ecology, the diminishing numbers and the field features by which these organisms may be identified. The class will provide experiences with such behavior patterns as territoriality, camouflage actions, nuptial display and care of the young.

• **35c INSECTS (1 unit)**

  Eighteen hours of lecture/laboratory/field trips.
  Prerequisite: None.
  A basic study of entomology with special emphasis for elementary school classroom teachers. Students will learn to recognize many native insects and to identify insects using scientific keys. Course emphasis will be on collection, identification, preservation and control of insects. Beneficial as well as detrimental aspects will be studied. A field trip for collection is required.

• **35d KNOW YOUR BODY (1 unit)**

  Eighteen hours of lecture/laboratory/demonstration.
  Prerequisite: None.
  A study of specific body systems with emphasis for elementary school classroom teachers. Students will be exposed to the functioning of the cardiovascular, respiratory and urinary systems. Lab-demo will provide an opportunity to better understand how the body functions and why.

• **35e FRESH WATER BIOLOGY (1 unit)**

  Eighteen hours of lecture/field trips.
  Prerequisite: None.
  A study of fresh water life with special emphasis for elementary school teachers. Students will learn to recognize many plants and animals, to make collecting equipment and to utilize aquariums and terrariums in the classroom. Two Saturday field trips will be taken to local environs.

• **35f SEASHORE LIFE (1 unit)**

  Eighteen hours of lecture/laboratory/field trip.
  Prerequisite: None.
  A study of seashore life with special emphasis for elementary school classroom teachers. Students will learn to recognize many typical seashore animals and plants, will examine several seashore habitats, and will study the pattern and effect of tides. A field trip to the seashore is required for the study of plants and animals in their living situation.

• **35g CALIFORNIA HABITATS (1 unit)**

  Eighteen hours of lecture/laboratory/field trips.
  Prerequisite: None.
  An introductory study of some natural habitats of the valleys, foothills and mountains of Kern County and nearby areas. The course is especially useful for elementary school classroom teachers who wish to become more familiar with the common plants and animals of the area and the environmental factors which govern their ecological relationships. Week-end field trips are an integral part of the course and provide students an opportunity to identify and study organisms as parts of natural communities.
53 GENERAL BIOLOGY (3 units)

Two hours lecture, two hours laboratory/demonstration and field trips by arrangement.
Prerequisite: None.
Outlines the main facts and principles of biology; experience in the use of scientific method. Recommended (and may be required) as preparation for other college biological sciences whenever the previous school record indicates insufficient preparation for such studies. Not open for credit to students who have already completed BIOL 11, BIOL 1a, PHYSL 1 or high school biology with a grade of "B" or higher.

ENVIRONMENT (ENVIR)

• 1 ENVIRONMENT AND MAN (3 units)

Two hours lecture and one hour lecture/discussion.
Prerequisite: None.
Major consideration will be given to the process which will sustain humans on this planet. Topics to include man's environment as seen from the biological, geological, historical, religious, social, economic and philosophical points of view.

HEALTH SCIENCE (HL SC)

• 1 SURVEY OF ANATOMY AND PHYSIOLOGY (4 units)

Six hours lecture and demonstration/laboratory.
Prerequisite: None.
A first course in integrated life science for students in health science programs. Principal emphasis is on the structure and function of human organ systems. Also includes cell structure and function, human development and human heredity.

• 2 PHYSIOLOGY OF SYSTEMS AND CELLS (5 units)

Three hours lecture and six hours laboratory.
Prerequisites: HL SC 1 and CHEM 11 with a grade of "C" or higher; NURS 1 or equivalent (may be taken concurrently).
An integrated science course designed for students in the Associate Degree Nursing Program. Designed to develop an understanding of the fundamental concepts of human physiology. Human anatomy and biological chemistry are reviewed where necessary. Pathology, particularly medical microbiology, is introduced where applicable.

• 3 INTEGRATED PATHOPHYSIOLOGY (5 units)

Three hours lecture and six hours laboratory.
Prerequisites: NURS 2b or its equivalent (may be taken concurrently) and HL SC 2 with a grade of "C" or higher.
An advanced biological science course designed for Associate Degree Nursing students. The lectures approach disease from thirteen pathophysiological processes, considering the disease model, clinical aspects, pathophysiology and the disease management. Actual patient medical records and clinical experience will be related to the lecture and laboratory activities.

PHARMACOLOGY (PHARM) (PHAR)

90 CONTINUING EDUCATION IN PHARMACY (0 units)

Five hours per week for three weeks. May be offered as a weekend workshop.
Prerequisite: Registration as a pharmacist.
Designed primarily to meet the continuing education requirements of the California State Board of Pharmacy for license renewal. The lectures may include any topic that might be taught in an accredited College or School of Pharmacy or any topic deemed helpful in professional practice; may include the following areas: Pharmacology, Biochemistry, Physiology, Pharmaceutical Chemistry, Pharmacy Administration, Pharmacy Jurisprudence, Public Health and Communicable Diseases, Professional Practice Management, Anatomy and Histology. Topics will be submitted to the California State Board of Pharmacy for approval as either "acceptable" or "accredited" in status. Courses may be repeated as often as is appropriate to the student's needs.

PHYSIOLOGY (PHYSL)

• 1 INTRODUCTORY PHYSIOLOGY (5 units)

Three hours lecture and six hours laboratory.
Prerequisite: Any one of the following courses: CHEM 1a, 2a, 11, ANAT 1, BIOL 1a, 11.
The physiology of bone, muscle, nerve, circulation, respiration, digestion, excretion, endocrines and reproduction. Introductory course in human physiology with special emphasis on the needs of students majoring in biology, nursing, physical education and medical sciences.

• 11 HUMAN PHYSIOLOGY (4 units)

Three hours lecture and three hours laboratory.
Prerequisite: ANAT 11 or equivalent.
Deals with the functions of human organ systems. Laboratory investigation and lecture demonstrations will give emphasis to both chordate animal systems and human body functions. Special emphasis for physical education majors.
MACHINE SHOP
See Industrial Education

MANAGEMENT
See Business Education

MARKETING
See Business Education

MATHEMATICS

MATHEMATICS
(MATH)

Required Courses

| UN | MATH 6a | Analyt Geom Calc I | 4.0 |
| UN | MATH 6c | Calculus III | 4.0 |
| UN | MATH 6b | Analyt Geom Calc II | 4.0 |
| UN | MATH 6d | Calculus IV | 4.0 |

Recommended Courses

| UN | PHIL 7 | Intro Logic | 3.0 |
| UN | COM S 18 | Fortran Programming | 3.0 |
| UN | PHYSC 1ad Physics | 4.0 |
| UN | MATH 22 | Probability/Statist | 3.0 |
| UN | COM S 5 | Basic Programming | 3.0 |

COURSE DESCRIPTIONS

A ELEMENTARY ALGEBRA (3 units)

Three hours lecture.
Prerequisite: Qualifying score on entrance examination and/or counselor approval.
Fundamental concepts and mathematical processes, first degree equations, special products and factoring, fractions and fractional equations, ratios, proportions, radicals, exponents, graphs, simultaneous linear equations, quadratic equations.

B GEOMETRY (3 units)

Three hours lecture.
Prerequisite: MATH A or one year of high school algebra.
Elementary logic, fundamental geometric constructions, congruent triangles, similar triangles, geometric proofs, parallel lines, parallelograms, circles, loci, ratio and proportion, areas, “pythagorean” theorem and its applications, geometry of space and coordinate geometry.

C PLANE TRIGONOMETRY (3 units)

Three hours lecture.
Prerequisites: Plane geometry and grade of “C” or higher in either advanced high school algebra or MATH D.
The use of trigonometric functions in the solution of problems involving right and oblique triangles; the verification of trigonometric identities; the solution of conditional trigonometric equations; the graphing of trigonometric functions; the study of inverse trigonometric functions; the study of logarithms and logarithmic equations.

D INTERMEDIATE ALGEBRA (4 units)

Four hours lecture.
Prerequisites: Grade of “C” or higher in either one year of high school algebra or MATH A.
Topics covered are sets and set operations, fundamental operations, signed numbers, factoring, linear equations, systems of equations, simple and complex fractions, functional notation, simple graphs, exponents and radicals, quadratic equations, ratio, proportion and variation, determinants, and the binomial theorem.

1 MATHEMATICAL ANALYSIS (3 units)

Three hours lecture.
Prerequisites: MATH D and C or equivalent.
Topics include polynomial, rational, exponential and logarithmic functions, elementary theory of equations, graphing techniques, selected topics from analytic geometry, mathematical induction, symbolic logic, matrix operations and matrix methods for solving systems of linear equations.

2 BASIC FUNCTIONS AND CALCULUS FOR BUSINESS (4 units)

Four hours lecture.
Prerequisite: Two years of high school algebra with a present working knowledge of algebra or MATH D or equivalent.
Modern concepts in mathematics including functions, matrix algebra and sequences; the basic concepts of differential calculus with an introduction to integral calculus involving numerous applications to business.

6a ANALYTIC GEOMETRY AND CALCULUS I (4 units)

Four hours lecture.
Prerequisites: MATH C, D and 1 or equivalents with a grade of “C” or higher in each course.
A unified course in the elements of analytic geometry, differential calculus and introduction to integration of algebraic functions.

6b ANALYTIC GEOMETRY AND CALCULUS II (4 units)

Four hours lecture.
Prerequisite: MATH 6a with a grade of “C” or higher.
Continuation of course I. Analytic geometry, differential and integral calculus.
• 6c CALCULUS III (4 units)

Four hours lecture.
Prerequisite: MATH 6b with a grade of “C” or higher.
Continuation of course II. Partial differentiation, multiple integrals, vector analysis, including theorems of Green, Gauss and Stokes; infinite series, including Taylor and Fourier, complex variables.

• 6d CALCULUS IV (4 units)

Three hours lecture.
Prerequisite: MATH 6c with a grade of “C” or higher.
Topics from elementary differential equations include separation of variables, homogeneous and exact equations, integrating factors, Wronskians, operators, variation of parameters, undetermined coefficients, Laplace transforms, series solutions, and systems of differential equations. Topics from linear algebra include vector spaces and subspaces, linear independence, bases, linear transformations, null spaces, image spaces, inverse transformation and matrix operations.

• 15 MATHEMATICS FOR GENERAL EDUCATION (3 units)

Three hours lecture.
Prerequisite: Eligibility for ENGL 1 or higher.
Topics from the history of mathematics, the relationship of mathematics to modern society, elementary theory of probability and statistics, the types and uses of computers, set theory, number theory and logic.

• 22 ELEMENTARY PROBABILITY AND STATISTICS (3 units)

Three hours lecture/discussion.
Prerequisite: MATH D or equivalent.
Elements of probability, descriptive and inferential statistics. Topics include: organization of data, graphs, frequency tables, histograms, measures of central tendency and dispersion, probability, binomial problems, and the normal distribution. Also covered are large and small samples, student's t-distribution, hypothesis testing, confidence intervals, linear regression, correlation, chi-square, and other non-parametric statistics.

• 23 FINITE MATHEMATICS (3 units)

Three hours lecture.
Prerequisite: MATH D or 22 or equivalent with “C” or higher.
An introduction to modern mathematics including selected topics in logic, set theory, probability, matrices and linear programming. Insofar as possible, the topics and subject matter are organized so as to apply to students in business administration and economics.

• 50 MODERN COLLEGE ARITHMETIC AND PRE-ALGEBRA (3 units)

Three hours lecture per week.
Prerequisite: Counselor's recommendation and a qualifying test score.
A general review of basic arithmetic including the fundamental operations of addition, multiplication, subtraction and division of whole numbers, decimals and fractions. Basic understanding and application of percent to be taught with emphasis placed on this concept as a simple equation. Fundamental ideas of signed numbers, ratio and proportions, simple equations and the basic structure of mathematics to be introduced as pre-algebra concepts.

• 53a BEGINNING MATHEMATICS FOR ELECTRONICS (3 units)

Three hours lecture.
Prerequisite: One year of high school algebra or equivalent.
Basic mathematics for electrical and electronics majors. Course includes the use of the scientific electronic calculator, first degree equations, special products and factoring, fractional equations, simultaneous equations, exponents, radicals, Thevenin's theorem, and Norton's theorem.

• 53b ADVANCED MATHEMATICS FOR ELECTRONICS (3 units)

Three hours lecture.
Prerequisite: MATH 53a or equivalent.
Includes trigonometry, periodic functions, vector algebra, quadratic equations, logarithms, number systems for computers, and the solutions of series and parallel A.C. circuits.

• 53c—53d CALCULUS FOR ELECTRONICS (3—3 units)

Three hours lecture.
Prerequisites: A grade of “C” or higher in MATH 53b. Grade of “C” or higher in 53c prerequisite to 53d.
Designed primarily for electronics and electrical technology majors to provide an introduction to the calculus and the fundamental mathematics and circuit analysis. Emphasizes fundamental concepts rather than a high degree of mathematical proficiency.

• 54 INDUSTRIAL MATHEMATICS (3 units)

Three hours lecture.
Prerequisite: None.
An elementary course in mathematics intended primarily for vocational and industrial majors covering arithmetic processes, ratio, proportion and elementary algebra. Included is a brief coverage of personal finance with emphasis on payroll deductions, budgets and installment credit.
60 BASIC ARITHMETIC (3 units)

Three hours lecture.
Prerequisite: None.
Designed to meet the needs of the individual student for everyday living and job qualifying tests, as well as preparation for advanced courses in mathematics. The fundamental operations of whole numbers, fractions, decimals and percents are stressed.

77b MATHEMATICS LIFE EXPERIENCE (3 units)

Three hours lecture.
Prerequisite: None.
The teacher aide will better understand that the Math Life Experience curriculum is designed to tempt teenage students into learning more about mathematics, while seeming to teach it less.

200a ELEMENTARY ALGEBRA (3 units)
Self-paced, open entry/open exit. For description, see MATH A.

200c PLANE TRIGONOMETRY (3 units)
Self-paced, open entry/open exit. For description, see MATH C.

200d INTERMEDIATE ALGEBRA (4 units)
Self-paced, open entry/open exit. For description, see MATH D.

250 MODERN COLLEGE ARITHMETIC AND PRE-ALGEBRA (3 units)
Self-paced open entry/open exit. For description, see MATH 50.

260 BASIC ARITHMETIC (3 units)
Self-paced, open entry/open exit. For description, see MATH 60.

MUSIC

MUSIC MAJOR OR MINOR

(UNIVERSITY OR STATE COLLEGES)

Students who plan to major or minor in music should commit themselves to the highest possible level of proficiency in theory, piano, literature, group performance, and applied (individual) instruction in their performance area. Students should take the required courses in music and complete courses in general education for the transfer college of their choice. Elective courses will both enrich the student's background and balance weak areas of knowledge for later academic growth.

Required Courses

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<td>Elementary Theory</td>
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<tr>
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Group Performance (Select one each semester)

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<td>College Orchestra</td>
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Other Suggested Courses

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<td>Class Voice</td>
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<tr>
<td>MUSIC 13ad</td>
<td>Jazz Ensemble</td>
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<tr>
<td>MUSIC 23</td>
<td>Jazz Appreciation</td>
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COURSE DESCRIPTIONS

1a–1b ELEMENTARY THEORY (4—4 units)

Three hours lecture and two hours laboratory. Evaluation by instructor.
Prerequisites: 1a. Departmental examination (to be administered first day of class) and concurrent enrollment in MUSIC 1ab. 1b. Completion of MUSIC 1a and concurrent enrollment in MUSIC 1ab.
Musical literature is used to develop writing, keyboard and analytical skills. The Department orients the student in the field of his emphasis, be it instrumental, vocal, keyboard or a combination of these.

2 BASIC ELEMENTS OF MUSIC (3 units)

Three hours lecture.
Prerequisite: MUSIC 1a to be taken concurrently.
Designed for the student with little or no previous experience in the reading and writing of music. Development of beginning skills, including ear training, notation, and basic elements of music theory.

5a—5d CLASS PIANO (1—1—1—1 unit)

Two hours laboratory.
Prerequisite: For 5a, none.
Open to students beginning the study of piano; recommended for students preparing to teach in the elementary grades and for music majors specializing in voice or instruments, other than the piano.
• 6a—6b—6c—6d CLASS VOICE (1—1—1—1 unit)

Two hours laboratory.
Prerequisite: None. A basic understanding of music fundamentals, although not required, would be highly desirable.
Elementary solo vocal training. Emphasizes breath control, placement of tone, posture and other basic concepts. 6b—6c—6d emphasizes repertoire and further technical development.

• 9a CLASS GUITAR (1 unit)

Two hours laboratory.
Prerequisite: A suitable acoustic guitar required.
Designed to teach the student how to play the guitar. The student will learn correct right and left hand technique, how to read guitar music, basic chords, finger-picking and strumming.

• 9b INTERMEDIATE CLASS GUITAR (1 unit)

Two hours laboratory.
Prerequisite: MUSIC 9a or equivalent. Student must have own acoustic guitar.
Designed to teach intermediate techniques of guitar playing. The student will learn advanced chord positions, scales, arpeggios, slurs, and bar chords.

• 10a—10b—10c—10d CONCERT BAND (1—1—1—1 units)

Three hours laboratory.
Prerequisite: Evaluation by instructor.
Emphasizes rehearsal and performance of standard band literature. Public performances are required. Performances include athletic games, assemblies and concerts.

• 12a—12b—12c—12d COLLEGE ORCHESTRA (1—1—1—1 unit)

Three hours laboratory.
Prerequisites: Previous experience and audition for instructor.
Performance of standard works from the orchestra literature. Open to advanced students playing orchestra instruments. Contact instructor to arrange audition.

• 13a—13b—13c—13d JAZZ ENSEMBLE (1—1—1—1 unit)

Three hours laboratory.
Prerequisite: Evaluation by instructor.
Designed for the student desiring to enter the fields of professional dance music, radio or theater orchestra work. Opportunity is provided for practical experience in organizing instrumental combinations of all kinds and sizes. Training in standard dance band phrasing and improvisation. The Jazz Ensemble will perform at different functions and, when given the opportunity, will perform with nationally known guest artists.

• 14a—14b—14c—14d COLLEGE CHOIR (1—1—1—1 unit)

Three hours laboratory.
Prerequisites: Previous experience in a choral group and demonstrated proficiency, and audition by instructor.
A choral ensemble of select voices which will study major choral literature of all the historical periods. Public performance required for credit.

• 15 EAR TRAINING (1—1 unit)

Two hours laboratory.
Prerequisite: MUSIC 1a—1b and MUSIC 2 to be taken concurrently or evaluation by instructor. The assignment of class level will be determined by the instructor.
Designed to develop aural proficiency and facility at dictation, chord and interval recognition, and rhythm.

• 17a—17b—17c—17d CHAMBER SINGERS (1—1—1—1 unit)

Three hours laboratory.
Prerequisites: Previous experience in a choral group and demonstrated proficiency. Audition by instructor.
A select choral group, specializing in rehearsal and performance of all choral literature for all historical periods. Public performance required for credit.

• 19a—19b—19c—19d MARCHING AND ACTIVITIES BAND (1—1—1—1 unit)

Four hours laboratory.
Prerequisites: Definite skill on a band instrument and evaluation by instructor.
The Marching Band participates in home game pageantry and halftime shows, away football games and performances when feasible, and parades. Emphasis is on the development of showmanship, performance of popular music and bandsman esprit.
The Activities Band performs at most away football games, all home basketball games and other specially designated events.

• 21a—21b SURVEY OF MUSICAL LITERATURE (3—3 units)

Three hours lecture.
Prerequisite: Some knowledge of music and its terminology.
A survey of styles, practices and aesthetics, which traces the lines of musical development from the Greco-Early Christian era to the present. Uses the musical score as a primary source for study. For liberal arts and music majors.

• 22abc MUSIC APPRECIATION (3 units)

Three hours lecture.
Prerequisite: None.
An introduction to music as the listener's art. Concerts, records and film provide illustrations for directed listening as a basis of appreciation.
• 23 APPLICTION OF JAZZ (3 units)

Three hours lecture.
Prerequisite: None.
Introductory course in the history and appreciation of jazz. Lectures, listening, laboratories and concert attendance are required.

• 26a JAZZ THEORY (1 unit)

Two hours lecture/laboratory for nine weeks.
Prerequisite: MUSIC 1a, or equivalent, approved professional experience or evaluation by instructor.
The student will understand the principles of jazz theory related to contemporary jazz practice and develop proficiency in jazz score analysis.

• 26b JAZZ ARRANGING (1.5 units)

Two hours lecture, one hour laboratory for nine weeks.
Prerequisite: MUSIC 1a, or equivalent, approved professional experience or evaluation by instructor.
The student will understand jazz instrument pedagogy and will develop skills in arranging both published and original material for selected jazz ensembles of varied size and instrumentation.

• 27 HISTORY OF AMERICAN POPULAR MUSIC (3 units)

Three hours lecture.
Prerequisite: None.
An introduction to the historical and stylistic developments of Rock music, with emphasis on its social, economic and political consequences.

• 34 MEXICAN AND CHICANO MUSIC (3 units)

Three hours lecture and discussion.
Prerequisite: None.
An historical survey of Mexican music from Pre-Columbian Culture to the present. Analysis of diverse styles of music in Mexico and in the Chicano Community. Emphasis on the music of Mexico, composition of leading Mexican composers, aspects of indigenous and Mexican/Chicano folk music. Course may be offered either as a regular class or through Coordinated Instructional Systems, using broadcast media, with seminars and examinations by arrangement. Not open to students with credit in CH ST 34.

53a—53b—53c—53d JAZZ ENSEMBLE WORKSHOP (1—1—1—1 units)

Three hours laboratory.
Prerequisite: Evaluation by instructor.
A study of the techniques of stage band playing, emphasizing interpretation of the different styles of stage band music (jazz, rock, latin, etc.) as well as section playing, improvisation and odd meters. Arranging for all sizes of jazz-rock ensembles will be explored.

54a—54b—54c—54d COLLEGE CHORALE (1—1—1—1 unit)

Three hours laboratory.
Prerequisite: None.
A select choral ensemble of mixed voices specializing in the rehearsal and performance of major choral works. Repertoire is selected from choral literature of all periods.

55a—55b—55c—55d SYMPHONIC WIND ENSEMBLE (1—1—1—1 unit)

Three hours laboratory.
Prerequisite: Evaluation by instructor.
An elite concert band, playing the finest traditional and contemporary literature available. Emphasis is on a high degree of individual musicianship and fine ensemble playing. Formal concerts to be given with outstanding guest soloist and/or conductor.

230a—230b—230c MUSIC LABORATORY (0.5—1 unit. Limit 4 units.)

Eighteen hours laboratory per half unit.
Prerequisite: None.
The student will learn to read, decipher, and perform the many rhythmic combinations in music through a self-pacing programmed system.

NUTRITION
See Family and Consumer Education

OFFICE SKILLS
See Business Education

“OPTIONS”
“Opportunity Program Training Individuals for Occupational and Non-Traditional Career Success”

The OPTIONS program is designed for re-entry women, new students, women and men in career change. It is a “package program” which meets five days per week. For one semester students will look, with the help of expert guidance, at their abilities, and career potential. Participants will be given individualized help in the basic learning skills including Math and English. Students will be given support and encouragement throughout the semester. Attaining a better degree of health and fitness will also be emphasized. Students will develop confidence as they begin or return to college. Participants will also select from opportunities available in educational and vocational training in both traditional and non-traditional areas.

Required Courses

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<td>Communicatn Skills</td>
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</table>
A major in philosophy has always been and continues to be one of the strongest traditional liberal arts majors in higher education. Although its immediate use would seem to be limited to teaching or research in higher education, its emphasis on logical thinking, theories of knowledge, value and reality, truth, rational argument and proof make it an excellent pre-professional undergraduate major (e.g., for law, theology, medicine, business, computer science) or minor (e.g., for the natural, physical and social science and humanities majors).

**Required Courses**

| UN | PHIL 6a Intro Philosophy | 3.0 | PHIL 10 Ethics | 3.0 |
| UN | PHIL 7 Intro Logic | 3.0 | PHIL 12 Ethics Living/Dying | 3.0 |

**Recommended Courses**

| UN | PHIL 6a Intro Philosophy | 3.0 | PHIL 35 Mexican Philosophy | 3.0 |
| UN | PHIL 14 Bus/Soc Responsib | 3.0 | PHIL 37 Intro Wrld Religions | 3.0 |
| UN | PHIL 30 Humanities/the Arts | 3.0 | SOC 1 Intro Sociology | 3.0 |
| UN | PHIL 32 Wrld Religions-East | 3.0 | SOC 2 Prob Mod Soc | 3.0 |
| UN | PHIL 33 Wrld Religions-West | 3.0 | POL S 2 Comparative Govt. | 3.0 |
| UN | PHIL 34 Yoga Theory/Practce | 3.0 |

**COURSE DESCRIPTIONS**

- **6a—6b INTRODUCTION TO PHILOSOPHY (3—3 units)**
  
  Three hours lecture.  
  Prerequisites: Eligibility for ENGL 1a is recommended. PHIL 6a, 7, or 10 are prerequisites for PHIL 6b.  
  A method, problems, and issues approach to philosophy through the reading of basic text and selected works. Major consideration is given to the satisfaction of the intellectual needs of the individual student and to the development, through understanding of the responsibilities borne by thoughtful men and women.

- **7 INTRODUCTION TO LOGIC (3 units)**
  
  Three hours lecture.  
  Prerequisite: Eligibility for ENGL 1a is recommended.  
  Traditional and some modern logic are considered with an emphasis on their relationships to language, thought and argument. The following material is covered: What is logic? Uses of language and definition and problems with informal fallacies. Deductive logic and the deductive method, not including propositional or class calculus or propositional functions and quantifiers. Inductive logic involving probable inference, causal connections, hypothesis and probability. Designed to fulfill the basic logic requirement at most state colleges and universities.

- **10 CONTEMPORARY MORAL ISSUES (3 units)**
  
  Three hours lecture.  
  Prerequisite: Eligibility for ENGL 1a is recommended.  
  A course to help the student clarify his/her moral values through discussion of contemporary moral issues. The issues to be examined include sexual morality, suicide, abortion, mercy killing, and the morality of business and politics.

- **12 ETHICS OF LIVING AND DYING (3 units)**
  
  Three hours lecture.  
  Prerequisite: Eligibility for ENGL 1a is recommended.  
  A philosophical yet practical approach to some of the major medical-ethical problems facing human beings today, such as: what patients should be told, the nature and importance of informed consent, the meaning and criteria for living, dying, and death including caring for the dying and allowing to die, mercy death, and mercy killing. Permeating these problems will be a study of the basis for ethical human relationships with particular emphasis on the relationship of the professional and the well to the sick and the dying.

- **13 MORAL ISSUES IN MEDICINE (3 units)**
  
  Three hours lecture.  
  Prerequisite: Eligibility for ENGL 1a is recommended, or completion of PHIL 12.  
  A study of human values and an application of them to specific moral issues which occur in medicine, such as: abortion and infanticide, truth-telling and confidentiality, human experimentation and informed consent, the morality of behavior control (psychosurgery, behavior modification, drug therapy, psychotherapy, etc.), genetic research, control and manipulation, organ donation and transplantation, and the allocation of scarce medical resources.

- **14 BUSINESS AND SOCIAL RESPONSIBILITY (3 units)**
  
  Three hours lecture/discussion.  
  Prerequisite: Eligibility for ENGL 1a is recommended.  
  Students will be able to recognize, critically evaluate, and learn how to resolve moral problems in the social and economic areas of their lives, such as issues concerning the environment, business and societal relations, racism, sexism, aging, work ethics, interpersonal ethical relations, consumerism, cheating, stealing, and lying.
• 30 HUMANITIES THROUGH THE ARTS (3 units)

Three hours lecture.
Prerequisite: None.
A study of human values, problems and meaning through an integrated, philosophical, and yet practical approach to film, drama, literature, music, painting, sculpture, and architecture with an emphasis on active student participation both audially and visually. Not open to students with credit in PHIL 31.

• 32 WORLD RELIGIONS: EAST (3 units)

Three hours lecture.
Prerequisite: None.
An impartial presentation of the distinctive genius of the major religions of the East: Hinduism, Buddhism, Confucianism and Taoism.

• 33 WORLD RELIGIONS: WEST (3 units)

Three hours lecture.
Prerequisite: None.
An impartial presentation of the distinctive genius of the major religions of the West: Judaism, Christianity, Islam.

• 34 YOGA: THEORY AND PRACTICE (3 units)

Three hours lecture.
Prerequisite: None.
An exploration of the practice and theory of yoga designed to give the student some insight into the intuitive basis of Eastern religious thought. Tantric and vedic philosophy will be compared to traditional Christian thought. The relevance of these Eastern perspectives to various contemporary social and intellectual problems will also be explored. Students should be willing to commit themselves to regular practice of some of the techniques presented.

• 35 MEXICAN PHILOSOPHY (3 units)

Three hours lecture.
Prerequisite: None.
A study of the background of Mexican philosophic thought as derived from Spanish and Indian sources and refined by Mexican writers. The influences of Spanish and Indian institutions on philosophic writers such as Samuel Ramos, Octavio Paz and Jose Vasconcellos are read and reported upon. Not open to students with credit in CH ST 35.

• 37 INTRODUCTION TO THE WORLD’S RELIGIONS (3 units)

Three hours lecture.
Prerequisite: None.
This course is a fresh exploration of contemporary religions in practice around the world. Utilizing originally-developed audio-visual materials, the course will present a variety of distinct religious traditions reflecting both the Western World (Catholicism, Orthodox Christianity, Islam, Judaism) and the Eastern World (Hinduism, Buddhism, Chinese Religion). The student will be able to see, practically first-hand, how these religions are practiced.

• 39 THE NEW RELIGIONS (3 units)

Three hours lecture.
Prerequisite: PHIL 32 or 33 recommended.
Acquaints the student with a variety of new religious movements practiced widely in America today. Hare Krishna, Children of God, Zen Buddhism, B’hai, Divine Light, Transcendental Meditation, among others will be the focus of study. Spokespersons for the particular religion and first-hand experience will highlight the course.

51 PHILOSOPHY FOR EVERYDAY LIVING (3 units)

Three hours lecture/discussion.
Prerequisite: None.
A philosophy course relevant to the problems of everyday life. Concentrates on clear thinking and the application of clear thinking to the problems of everyday life, especially moral issues. The thoughts of some great philosophers will be studied to see how they would approach the problems of everyday life.

52 LOGIC IN EVERYDAY LIFE (3 units)

Three hours lecture.
Prerequisite: None.
A non-technical approach to the use of reason in everyday life designed to aid the student in improving his own logical reasoning in such activities as reading newspapers and magazines, listening to speeches, dealing with the arguments of customers, employers, employees or clients, and to enable him to see logical fallacies in attempts to propagandize him in any of the many ways prevalent in our society today. Especially designed for the non-transfer, vocational-technical major who wishes to concentrate on applied rather than theoretical logical reasoning.
53ab WORK ETHICS (3 units)

53a—53b (1.5—1.5) equivalent to 53ab.

Three hours lecture.

Prerequisite: None.

A practical overview of the moral responsibilities and rights of workers in business, trades, and public services. Philosophy 53a focuses on the relationship of the worker to the firm. Among the issues to be discussed: conflicts of interest, including those associated with gifts and entertainment; honesty and expense accounts; the extent and limit of worker loyalty to the organization; the disposition of confidential data. Philosophy 53b focuses on the firm’s relationship to the worker. Various moral issues that relate to the following topics will be raised: tests, interviews, promotions, discipline, discharge, wages, work conditions, work satisfaction, privacy. In both courses, an attempt will be made (1) to sort out rights and responsibilities and (2) to establish a basis for proper work conduct.

70 TOPICS IN PHILOSOPHY (0.5—2 units)

Eight or thirty-six hours of instruction (minimum of 8 hours per 0.5 unit of instruction.)

Prerequisite: None.

Specialized topics in philosophy, such as, dealing with ethical issues in nursing, food services, automotive maintenance, and law enforcement; how to think critically; the effects of existentialism on literature and the arts; a brief study of a great philosopher and his influence on Western culture (e.g., Plato, Aristotle, Kant, Hume).

PHOTOGRAPHY
See Art

PHOTOJOURNALISM
See Communications

PHYSICAL EDUCATION
See Health and Physical Education

PHYSICAL SCIENCE

Architecture
Astronomy
Chemistry
Engineering
Geography
Geology
Industrial Drawing
Meteorology
Physical Science
Physics
Water Technology

The Bakersfield College Physical Science Department encompasses a large number of fields. Courses within these fields are taken by those who are preparing for a career in science or engineering, those who are fulfilling a General Education science requirement, and those simply wishing to learn about one or more of these fields.

Students who intend to transfer to four-year institutions as science or engineering majors can fulfill their lower division science requirements at Bakersfield College. Our students traditionally have been successful in upper division science studies at the University of California, the state colleges and universities, and at private universities.

The department offers Associate of Arts and Associate of Science degree programs in most of its fields. These include two-year career training programs in geologic technology, industrial drawing, and architectural drafting as well as programs designed for those who intend to transfer to a four-year college after receiving the associate degree.

Within the Physical Science Department, a student not only has many choices of major but also has the opportunity to explore a number of interesting possibilities. In some cases, general survey courses are available both for the potential science major who is "looking around" and for the non-science major who wants to learn some science. We are committed to making the learning of science interesting, meaningful, and enjoyable to our students.

ARCHITECTURE

ARCHITECTURE (Arch.), ARCHITECTURAL ENGINEERING (A.E.), CITY AND REGIONAL PLANNING (C.R.P.), CONSTRUCTION (CON.), LANDSCAPE ARCHITECTURE (L.A.)

The following curriculum is designed for students planning to transfer to the School of Architecture, and Environmental Design at California Polytechnic State University, San Luis Obispo. The student is advised to keep a portfolio of all work done in all architectural classes, since the level of advanced standing is dependent upon an evaluation of this portfolio.

The Bachelor of Architecture Degree at Cal Poly normally requires five years to complete. It is the exceptional student who is able to complete these programs in the allotted time. This may involve attending summer school to take some of the recommended courses listed below.

PRE-ARCHITECTURE: Those students entering Bakersfield College who have not completed three years of math and are not ready to enter MATH 1 (Math Analysis) should plan on at least three years at Bakersfield College to complete the lower division requirements for the architecture major at Cal Poly, S.L.O.
## PRE-ARCHITECTURE

### RECOMMENDED 3-YEAR PROGRAM FOR THOSE STUDENTS WHO ARE ENTERING COLLEGE DEFICIENT IN THEIR MATH & GE ENGLISH REQUIREMENTS

**CALIFORNIA POLYTECHNIC STATE UNIVERSITY, S.L.O.**

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<td>PHYS 1b</td>
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## ARCHITECTURE

### 2-YEAR TRANSFER PROGRAM FOR THOSE STUDENTS WHO ARE ENTERING COLLEGE READY TO TAKE MATH ANALYSIS (MATH 1) OR CALCULUS (MATH 6a) AND ENGLISH 1 or 1a

**CALIFORNIA POLYTECHNIC STATE UNIVERSITY, S.L.O.**

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### ADDITIONAL RECOMMENDED COURSES FOR CAL POLY, S.L.O.

- **Common to all five majors**
  - ECON 10 Intro to Economics: 3.0
  - PSYCH 1a General Psychology: 3.0
  - SPCH 1 Speech Communication: 3.0
  - ENGR 1a Plane Surveying: 3.0
  - BIOL 1 Concepts of Biology: 4.0

- **Architecture**
  - ENGR 1a Plane Surveying: 3.0
  - PHYSC 1a Mechanics: 4.0

- **City & Regional Planning**
  - PHIL 6a Intro Philosophy: 3.0
  - GEOL 1a Physical Geology: 4.0

- **Architectural Engineering**
  - MATH 6c Calculus III: 4.0
  - MATH 6d Calculus IV: 4.0

- **Landscape Architecture**
  - ENGR 1a Plane Surveying: 3.0
  - CHEM 1a General Chemistry: 5.0

### UC BERKELEY

Students planning to transfer to the University of California, Berkeley should expect to take the following recommended courses. Berkeley has a 4 year curriculum leading to the A.B. degree in the College of Environmental Design, with majors in Architecture, Landscape Architecture and City Regional Planning. A Master's Degree in Architecture, Landscape Architecture, or City Regional Planning would require an additional two years.

### Recommended Courses

| ARCH 1 | 1.0 | ARCH 22 | Env Design Fund II | 3.0 |
| ARCH 10 | 2.0 | ARCH 23 | Env Design Fund III | 3.0 |
| ARCH 11 | 3.0 | ARCH 41 | Instr Urban Envir I | 2.0 |
| ARCH 12 | 3.0 | ARCH 42 | Instr Urban Envir II | 2.0 |

### CAL POLY, POMONA

California State Polytechnic University, Pomona offers three undergraduate majors leading to the Bachelor of Science Degree and three programs leading to the Master's Degree. Both degrees offer majors in Architecture, Landscape Architecture, and Urban Planning. The student should plan on taking the same basic program as for Cal Poly, San Luis Obispo, but substituting MATH 1 for MATH 6a-6b and PHYSC 2a-2b for PHYSC 1a-1b.
CHEMISTRY

UC BERKELEY, CSU SAN JOSE, CSU SAN DIEGO, CSU FRESNO

The courses listed below are required for the above institutions and for most other four-year colleges and universities in order to transfer into the third year of a chemistry major program. Before planning a study list, the community college student should consult his/her counselor and study the catalog of the senior institution to which he/she intends to transfer.

The introductory courses in Physics (Physics 1a-1d or 2a-2b) and Chemistry (Chemistry 1a-1b, 2a or 11) are designed to provide the basic foundation in and understanding of the laws and principles of the physical world (matter and energy) for all science, health science, and pre-professional majors. Thus, these courses should be completed early in a student's academic program sequence of study to insure greater academic success in subsequent courses in the student's field of interest and a more complete understanding of that field.

Required Courses

<table>
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<tr>
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<td>MATH 6c</td>
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<td>CHEM 1b</td>
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Recommended Courses

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ENGINEERING

UNIVERSITY OF CALIFORNIA, CALIFORNIA STATE COLLEGES AND UNIVERSITIES, AND PRIVATE UNIVERSITIES

Bakersfield College offers all of the courses required for two full years of engineering education. Completion of these courses, called the "engineering core," prepares students for transfer at the junior level to the colleges and universities offering bachelor's degrees in engineering. This is in accordance with the Summit Articulation Agreement of the Engineering Liaison Committee which states that "any student of a California Community College, with a stated major in engineering, who presents a transcript showing satisfactory completion of the proposed core program in lower division will be able to enroll in any four-year California university or college (which graduates engineers) with regular junior standing; and further, said student can complete an engineering program in four additional semesters (or six additional quarters) and obtain a bachelor's degree."

The program shown below assumes satisfactory prior completion of high school mathematics through trigonometry and mathematical analysis or MATH C and MATH 1 at Bakersfield College, one year of high school mechanical drawing or IN DR 30a, one year of high school chemistry or CHEM 2, and eligibility for ENGL 1a, Expository Composition. Those students who have not met these requirements will probably need more than four semesters to complete the core courses. Students who desire an associate degree will need more than four semesters to complete the general education requirements along with the courses listed below.

First Semester

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Second Semester

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Electives recommended for selected engineering specializations are as follows:

- PHYSICS 1d — Modern Physics—for nuclear, some chemical, electrical
- ENGR 1ab — Plane Surveying—for civil
- CHEM 8 — Organic Chemistry—for chemical
- GEOL 1a — Physical Geology—for geological, petroleum
- GEOL 72 — Intr Petrol Geol—for petroleum
- MATH 22 — Elem Prob Stat—for computer
- COM S 10 — The Pascal Language—instead of, or in addition to, COM S 18 Fortran Programming.
Before planning a study list, the community college student should consult a counselor and study the catalog of the senior institution to which he/she intends to transfer.

**UCLA**

<table>
<thead>
<tr>
<th>Required Courses</th>
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<tr>
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<td>MATH 6a Analyt Geom Calc I</td>
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<tr>
<td>GEO 1b Historical Geology</td>
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<td>MATH 6b Analyt Geom Calc II</td>
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<tr>
<td>GEO 6a Intro Mineralogy</td>
<td>2.0</td>
<td>PHYS 2ab General Physics</td>
</tr>
<tr>
<td>GEO 6b Crystallography</td>
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<td>BIO 1a Prin Animal Biology</td>
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<td>CHEM 1a General Chemistry</td>
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<td>CHEM 1b Gen Chem/Qual Anal</td>
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**SAN DIEGO STATE UNIVERSITY**

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<td>GEO 6a Intro Mineralogy</td>
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<tr>
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<td>CHEM 1a General Chemistry</td>
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<td>AND 10L Intro Geology lab</td>
<td>1.0</td>
<td>CHEM 1b Gen Chem/Qual Anal</td>
</tr>
<tr>
<td>GEO 1b Historical Geology</td>
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<td>MATH 6a Analyt Geom Calc I</td>
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<table>
<thead>
<tr>
<th>Recommended Courses</th>
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<tbody>
<tr>
<td>IN DR 30a Industrial Drawing</td>
<td>3.0</td>
<td>MATH 6b Analyt Geom Calc II</td>
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**PHYSICS**

Before planning a study list, the community college student should consult a counselor and study the catalog of the senior institution to which he/she intends to transfer.

The introductory courses in Physics (Physics 1a-1d or 2a-2b) and Chemistry (Chemistry 1a-1b, 2a or 11) are designed to provide the basic foundation in and understanding of the laws and principles of the physical world (matter and energy) for all science, health science, and pre-professional majors. These courses should be completed early in a student's academic program sequence of study to insure greater academic success in subsequent courses in the student's field of interest and a more complete understanding of that field.

**Required Courses**

<table>
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<th>UN</th>
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<tbody>
<tr>
<td>PHYSC 1a Mechanics</td>
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<tr>
<td>PHYSC 1b Wave Motion, Heat</td>
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</tr>
<tr>
<td>PHYSC 1c Electricity/Magnetism</td>
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<tr>
<td>PHYSC 1d Modern Physics</td>
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<tr>
<td>CHEM 1a General Chemistry</td>
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**Recommended Courses**

<table>
<thead>
<tr>
<th>UN</th>
<th>UN</th>
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</thead>
<tbody>
<tr>
<td>COM S 10 The Pascal Language</td>
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</tr>
<tr>
<td>COM S 18 Fortran Programming</td>
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</tbody>
</table>

**ASSOCIATE DEGREE PROGRAMS**

Associate of Arts degrees can be earned in most areas by fulfilling college major and General Education requirements. The Associate of Science degree is available to those who complete the course of study defined for the major as well as the General Education requirements as outlined earlier in this catalog.

Counselors, advisors, and department faculty will aid students in planning for either the Associate of Arts or Associate of Science degree.

The course requirements for Associate of Science degree programs are outlined below. The requirements shown are limited to those courses in the subject and related subjects that are needed for the degree. General Education courses as well as minimum competency levels as outlined under Graduation Requirements must be satisfied as well.

In addition to the course requirement list, suggested programs for each area are shown in order to help plan courses of study. Because students vary in their preparation and rate of progress through a curriculum, some alteration in the programs as shown is likely in individual cases.
ASSOCIATE OF SCIENCE DEGREE PROGRAMS

ARCHITECTURAL DRAFTING

Minimum units required in related disciplines — 34

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
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<td>Env Desgn Fund II</td>
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<tr>
<td>ARCH 6</td>
<td>Materials of Constr</td>
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<td>ARCH 23</td>
<td>Env Desgn Fund III</td>
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<tr>
<td>ARCH 10</td>
<td>Freehand Drawing</td>
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<td>ARCH 30</td>
<td>Archit Model Bldg</td>
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</tr>
<tr>
<td>ARCH 11</td>
<td>Intro Drwng/Perspcv</td>
<td>3.0</td>
<td>ARCH 31</td>
<td>Archit Practice I</td>
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<tr>
<td>ARCH 12</td>
<td>Basic Graphics</td>
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<td>ARCH 32</td>
<td>Archit Practice II</td>
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<td>IN DR 11</td>
<td>Intr Archit Drwng</td>
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Suggested Program

First Semester

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<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
<th>Course Code</th>
<th>Course Title</th>
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<td>ARCH 6</td>
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<td>ARCH 21</td>
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IN DR 11 Intr Archit Drwng 3.0

ARCH 11 Intro Drwng/Perspcv 3.0

ARCH 22 Env Desgn Fund II 3.0

ARCH 31 Archit Practice I 3.0

PHYS 2a General Physics 4.0

Third Semester

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<th>Course Code</th>
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<th>UN</th>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ARCH 11</td>
<td>Intro Drwng/Perspcv</td>
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<td>ARCH 12</td>
<td>Basic Graphics</td>
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<tr>
<td>ARCH 22</td>
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<td>ARCH 23</td>
<td>Env Desgn Fund III</td>
<td>3.0</td>
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<tr>
<td>ARCH 31</td>
<td>Archit Practice I</td>
<td>3.0</td>
<td>ARCH 32</td>
<td>Archit Practice II</td>
<td>3.0</td>
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<tr>
<td>PHYS 2a</td>
<td>General Physics</td>
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Fourth Semester

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<tbody>
<tr>
<td>IN DR 11</td>
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GEOL 1a Physical Geology 5.0

GEOL 1b Historical Geology 4.0

GEOL 72 Intro Petrol Geol 5.0

GEOL Electives 5.0

CHEM 1a General Chemistry 5.0

CHEM 2a Intro Gen Chemistry 5.0

IN DR 30a Industrial Drawing 5.0

MATH C Plane Trigonometry 4.0

Suggested Program

First Semester

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<tr>
<th>Course Code</th>
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GEOL 1a Physical Geology 5.0

GEOL 1b Historical Geology 4.0

MATH D Intermed Algebra 4.0

CHEM 1a General Chemistry 5.0

PHYS 1a Mechanics 4.0

OR

PHYS 2a General Physics 4.0

MATH 6a Analyt Geom Calc I 4.0

OR

MATH 1 Math Analysis 3.0

Third Semester

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<th>Course Title</th>
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<tbody>
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CHEM 5 (Opt!) Quantit/Anal 4.0

BACT 2 *Bacteriol-Microbiol 4.0

OR

PHYS 2a General Physics 4.0

OR

BACT 1a Prin Animal Biology 4.0

BACT 1b Plant Biology 4.0

OR

BACT 11 Concepts of Biology 4.0

MATH 1 Math Analysis 3.0

Fourth Semester

<table>
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</table>

CHEM 1a General Chemistry 5.0

CHEM 8 Organic Chemistry 3.0

CHEM 9 Organic Chemistry Lab 3.0

PHYS 1c Electric Magnetism 4.0

MATH 6c* Calculus III 4.0

CHEM 11 Intro Drwng/Perspcv 3.0

BACT 2a General Graphics 4.0

OR

BACT 1a Prin Animal Biology 4.0

BACT 1b Plant Biology 4.0

BYOL 11 Concepts of Biology 4.0

COM S 5 Basic Programming 3.0

OR

COM S 18 Fortran Programming 3.0

GEOLOGY

Minimum units required in related disciplines — 31 to 43

Required Courses

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<tr>
<th>Course Code</th>
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CHEM 1b Gen Chem/Qual Anal 5.0

CHEM 8 Organic Chemistry 3.0

CHEM 5 (Opt!) Quantit/Anal 4.0

BACT 2 *Bacteriol-Microbiol 4.0

OR

PHYS 2a General Physics 4.0

OR

BACT 1a Prin Animal Biology 4.0

BACT 1b Plant Biology 4.0

OR

BACT 11 Concepts of Biology 4.0

MATH 1 Math Analysis 3.0

Suggested Program

First Semester

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<tbody>
<tr>
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GEOL 1a Physical Geology 5.0

GEOL 1b Historical Geology 4.0

MATH D Intermed Algebra 4.0

CHEM 1a General Chemistry 5.0

PHYS 1a Mechanics 4.0

OR

PHYS 2a General Physics 4.0

MATH 6a Analyt Geom Calc I 4.0

OR

MATH 1 Math Analysis 3.0
### GEOLOGIC TECHNOLOGY

**Required Courses**

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<td>CHEM 2a</td>
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**Suggested Electives**

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Minimum units required in related disciplines — 36

### INDUSTRIAL DRAWING

**Required Courses**

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<td>IN DR 30c</td>
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**Recommended Electives**

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**Suggested Program**

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<td>MCH S</td>
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Minimum units required in related disciplines — 32 to 35

### First Semester

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### Second Semester

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### Third Semester

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<td>IN DR 30d</td>
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### Fourth Semester

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<td>IN DR 20a</td>
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COURSE DESCRIPTIONS
ARCHITECTURE (ARCH)

• 1 INTRODUCTION TO ARCHITECTURE AND INTERIOR DESIGN 1 (1 unit)

One hour lecture. Prerequisite: None.

Familiarization with the professional fields of architecture, engineering, city planning, construction and landscape. Introduction to the design process and development as a basis for architectural analysis. Covers some material included in IN DR 1.

• 2 ARCHITECTURAL DESIGN LAB (1 unit)

Three hours lecture and laboratory. Prerequisites: ARCH 1, 10, 11, 12 and 21. Elements of visual perception. Theories of environmental design; program development; analytic techniques and problem solving methodologies. Behavioral and social implications of environmental design decisions. Projects in the environmental context. (Formerly ARCH 21.)

• 6 MATERIALS OF CONSTRUCTION (2 units)

Two hours lecture. Field trips required. Prerequisite: None. The use and application of building materials and the structural make-up of buildings.

• 10 FREEHAND DRAWING (2 units)

One hour lecture and three hours laboratory. Prerequisite: None. Exercises in drawing without mechanical aids. (Formerly ARCH 10a—10b.)

• 11 INTRODUCTION TO DRAWING AND PERSPECTIVE (3 units)

Six hours lecture and laboratory. Prerequisites: IN DR 11 or 30a and MATH B is equivalent. Concurrent enrollment in IN DR 11 is permissible for those with 2 years of high school drafting and trigonometry, all with "B" grades or higher. Basic techniques used in graphic communication. Orthographic and isometric projection. Mechanical perspective, shades and shadows.

• 12 BASIC GRAPHICS (3 units)

Six hours lecture and laboratory. Prerequisites: ARCH 10 and 11. Drawing as a communication tool in the environmental design fields. Exercises to develop basic skills and speed in the representation of ideas. Use of various drawing media.

• 21 ENVIRONMENTAL DESIGN FUNDAMENTALS I (3 units)

Three hours lecture/laboratory. Prerequisites: ARCH 1, 10 and 12. Introduction to basic design terminology, skills, and processes developed in a two-dimensional context as a foundation for more advanced design problems and architectural analysis. Elements of visual perception. Theories of environmental design. (Formerly ARCH 2.)

• 22 ENVIRONMENTAL DESIGN FUNDAMENTALS II (3 units)

One hour lecture/six hours laboratory. Prerequisite: ARCH 1, 10, 11, 12 and 21. Elements of visual perception. Theories of environmental design; program development; analytic techniques and problem solving methodologies. Behavioral and social implications of environmental design decisions. Projects in the environmental context. (Formerly ARCH 21.)

• 23 ENVIRONMENTAL DESIGN FUNDAMENTALS III (3 units)

One hour lecture/six hours laboratory. Prerequisite: ARCH 22. Elements of visual perception. Theories of environmental design; program development; analytic techniques and problem solving methodologies. Behavioral and social implications of environmental design decisions. Projects in the environmental context. Field trip to Los Angeles required. (Formerly ARCH 22.)

• 25 STRENGTH OF MATERIALS I (2 units)

Two hours lecture. Prerequisites: MATH 6a, PHYSC 1a. Loads on buildings, force systems, properties of plane areas, equilibrium of building elements, force analysis of beam and truss structures; shear and moment diagrams; introduction to arch and cable structures; problems in building structures.

• 26 STRENGTH OF MATERIALS II (2 units)

Two hours lecture. Prerequisite: ARCH 25 (may be taken concurrently). Introduction to properties of materials; deviations of equations for axial, bending and shear stress and strain in structural members of homogeneous materials; signing of members, combined stresses; structural sizing members of non-homogeneous materials; introduction to column behavior; biaxial stress conditions; principal stresses; problems in building structures.

• 30 ARCHITECTURAL MODEL BUILDING (1 unit)

Three hours lecture and laboratory. Prerequisite: None. Develops techniques and methods required in constructing various types of structural and presentation models used in the architectural field.

• 31 ARCHITECTURAL PRACTICE I (3 units)

One hour lecture and six hours laboratory. Prerequisites: ARCH 6 and 30. Introduction to construction techniques and working drawings. Theory and application of laws and codes affecting buildings. Working drawings as communication instruments. Field trips required.
32 ARCHITECTURAL PRACTICE II (3 units)
Six hours lecture and laboratory. Field trips required.
Prerequisite: ARCH 31.
Introduction to construction techniques and working drawings. Theory and application of laws and codes affecting buildings. Working drawings as communication instruments.

41 INTRODUCTION TO URBAN ENVIRONMENT I (2 units)
Two hours lecture.
Prerequisite: None. Recommended for all majors.
History and analysis of social and technological factors which have influenced the physical growth of cities. Philosophical approaches. Problems of growth and the development of various theories of city planning.

42 INTRODUCTION TO URBAN ENVIRONMENT II (2 units)
Two hours lecture.
Prerequisite: None.
History and analysis of social and technological factors which have influenced the physical growth of cities. Philosophical approaches. Problems of growth and the development of various theories of city planning.

45 BUILDING CODES (3 units)
Three hours lecture. Field trips required.
Prerequisite: None.
Study of the Uniform Building Codes, local codes and related ordinances. Fundamental structural concepts involved in code work, code interpretation and enforcement.

46 BUILDING AND RELATED CODES (3 units)
Three hours lecture.
Prerequisite: None.
Study of the Uniform Building, Plumbing, Mechanical and Electrical Codes. A companion course to ARCH 45 offering a greater in-depth study of the various codes which make up the Code of Building Regulations.

1 ELEMENTARY ASTRONOMY (3 units)
Three hours lecture.
Prerequisite: None.
An introductory course in the general principles and fundamental facts of astronomy. Among topics included are the development of the basic concepts and theories of astronomy, the motions of celestial bodies, the solar system, stars, galaxies and cosmology.

• 2 TOPICS IN MODERN ASTRONOMY (3 units)
Three hours lecture, the last hour being a lecture/demonstration/laboratory combination. Observing sessions and a field trip to Mt. Wilson Observatory will also be scheduled.
Prerequisite: ASTR 1.
A second course in introductory astronomy for non-science majors which explores recent astronomical developments and methods of observation. The student will learn the results of up-to-date investigations of the solar system and the search for extraterrestrial life, emphasizing data received from both manned and unmanned space probes. The student will understand nonmathematical descriptions of black holes, quasars and the universe as well as the underlying theories of relativity. Also, the student will be exposed to observational methods in astronomy through both lecture/demonstrations by the instructor and laboratory exercises.

CHEMISTRY (CHEM)

• 1a GENERAL CHEMISTRY (5 units)
Three hours lecture and six hours laboratory.
Prerequisites: High school chemistry and algebra with grades of "B" or higher or CHEM 2a with a grade of "C" or higher.
Basic principles of chemistry, including atomic structure, stoichiometry, chemical bond, periodic relationships of the elements, states and properties of matter, solutions, acids and bases, chemical kinetics, nuclear chemistry, chemical equilibrium, an introduction to descriptive chemistry of the non-metallic elements, and other topics as appropriate. The laboratory emphasizes quantitative methods.

• 1b GENERAL CHEMISTRY AND QUALITATIVE ANALYSIS (5 units)
Three hours lecture and six hours laboratory.
Prerequisite: A grade of "C" or higher in CHEM 1a.
Continuation of CHEM 1a. Includes ionic equilibria, oxidation-reduction, electrochemistry, chemical thermodynamics, coordination chemistry, the descriptive chemistry of selected metallic elements, with an emphasis on transition metals, and introduction to organic chemistry, and other topics as appropriate. The laboratory includes a systematic study of the theory and practice of qualitative inorganic analysis, quantitative techniques, and descriptive experiments.

• 2a INTRODUCTORY GENERAL CHEMISTRY (5 units)
Three hours lecture and six hours laboratory.
Prerequisite: MATH A or high school algebra.
The principles and applications of general college chemistry. Designed for liberal arts, physical education and some nursing majors. Recommended also for students who need additional background for the more intensive course, CHEM 1a. Not open for credit to those who have had CHEM 1a.
• 5 QUANTITATIVE ANALYSIS (4 units)

Two hours lecture and six hours laboratory.
Prerequisite: CHEM 1b with a grade of "C" or higher.
The theory and practice of quantitative chemical analysis. Includes volumetric, gravimetric and basic instrumental methods. Primarily for students majoring in chemistry or the medical sciences.

• 8 ORGANIC CHEMISTRY (3 units)

Three hours lecture.
Prerequisite: CHEM 1a.
A study of petroleum products, alcohols, ethers, carbohydrates, fats, proteins, dyes, explosives, medicines and many other related carbon compounds. For students interested in chemical industries, medicine, dentistry, pharmacy, engineering, clinical work, public health and in related biological fields of plant and animal sciences.

• 9 ORGANIC CHEMISTRY LABORATORY (3 units)

Two three hour lecture/lab periods per week.
Prerequisite: CHEM 8 (may be taken concurrently).
Covers basic techniques and a number of aliphatic and aromatic preparations, properties and reactions.

• 11 PRINCIPLES OF INORGANIC, ORGANIC AND BIOCHEMISTRY (5 units)

Three hours lecture, six hours laboratory.
Prerequisite: MATH A or equivalent.
A systematic study of the principles of inorganic, organic and biochemistry using a qualitative and quantitative approach. Topics include physical principles of chemistry; inorganic compounds and reactions; a survey of organic chemistry-classification, compounds, reactions, nomenclature; biochemistry-classification, composition, reactions in living organisms.

• 12 ORGANIC CHEMISTRY (5 units)

Three hours lecture and six hours laboratory.
Prerequisite: CHEM 1a with a grade of "C" or higher.
A study of the general theory of organic chemistry and the chemistry of aliphatic compounds. Primarily for chemistry and engineering students who plan on further organic chemistry courses.

55 CHEMISTRY IN THE REAL WORLD (3 units)

Three hours lecture.
Prerequisite: None.
Deals with the applied, practical aspects of chemistry which can be used by a person in his/her own daily life. It will emphasize common products and current problems which are chemically related. (Formerly CHEM 10.)

202 LEARNING SKILLS IN CHEMISTRY (0.5—4 units)

Eighteen hours laboratory, problem solving, or project work per unit of credit. May be taken four times only.
Prerequisite: Concurrent enrollment in a chemistry course or PHY 5 21.
Provides the opportunity for additional laboratory, project and/or supervised problem solving work for chemistry students.

ENGINEERING (ENGR)

• 1a—1b PLANE SURVEYING (3-3 units)

Two hours lecture and three hours laboratory.
Prerequisites: MATH C and one year of mechanical drawing or IN DR 30a. ENGR 1a is prerequisite to 1b.
Principles and practice of surveying including use of tape, level, transit, alidade; calculation of traverse, areas, volumes, curves; triangulation, stadia and place table mapping; engineering astronomy; public land surveys.

• 17 INTRODUCTION TO ELECTRICAL CIRCUITS AND ELECTRONIC DEVICES (3 units)

Three hours lecture and one hour discussion.
Prerequisites: PHYSC 1c and MATH 6c.
The fundamentals of circuit analysis; physical electronics of semiconductor and vacuum devices; basic amplifying switching circuits; typical electrical systems.

• 24 ENGINEERING GRAPHICS AND DESCRIPTIVE GEOMETRY (3 units)

One hour lecture and six hours laboratory.
Prerequisite: One year of high school mechanical drawing or IN DR 30a and MATH C or higher.
Orthographic projection, isometric and oblique drawing, graphic computation, and empirical equations. Point, line, and plane solutions, intersections, developments, and graphical calculus with emphasis upon the application of these principles to various engineering problems.

• 36 ENGINEERING MECHANICS — STATICS (3 units)

Three hours lecture.
Prerequisites: PHYSC 1a and MATH 6a.
Principles of statics and their application to engineering problems. Equilibrium of two-dimensional and three-dimensional systems of particles and rigid bodies. Concentrated and distributed force systems, structures, friction, virtual work and moments of inertia. For pre-engineering students.
• **45 PROPERTIES OF MATERIALS (3 units)**

Two hours lecture and three hours laboratory.
Prerequisites: CHEM 1a and PHYS 1b.
Internal structure of engineering materials. Characteristics of single phase metals, multiple phase metals, organic materials, ceramic materials and composite materials. Mechanical, thermal, chemical, electrical and radiation behavior of engineering materials. Laboratory investigation of the physical properties of metals, wood, soils, and concrete.

• **48 ENGINEERING ORIENTATION (1 unit)**

One hour lecture.
Prerequisite: None.
Student will gain a general knowledge of the engineering profession and what it takes to become an engineer. All of the major disciplines will be discussed.

• **50 ENERGY MANAGEMENT ENGINEERING (3 units)**

Three hours lecture.
Prerequisite: Some technical, scientific, or engineering background is recommended. Techniques and applications of energy analysis. (Complete Facility Audit) Topics selected from the following: rate analysis (emphasize time-of-use features); commercial-industrial load management, energy cost and energy tracking; energy system identification; lighting; heating, ventilation, air conditioning; process application; building envelope; co-generation; personal computer in energy technology. Intended for contractors, engineers, architects, those in charge of building maintenance and operations, and others who have an interest in this field. Final exam will be the test for certification as an Energy Auditor in the State of California.

• **1 INTRODUCTION TO GEOGRAPHY: PHYSICAL ELEMENTS (3 units)**

Three hours lecture.
Prerequisite: None.
A study of the basic elements of physical geography; climate, land forms, soils, natural vegetation and their patterns of world distribution.

• **2 INTRODUCTION TO GEOGRAPHY: CULTURAL ELEMENTS (3 units)**

Three hours lecture.
Prerequisite: None.
A study of the basic elements of cultural geography: population and settlement, locational concepts, economic activities, environmental influences and regional analysis.

• **GEOLOGY (GEOL)**

• **1a PHYSICAL GEOLOGY (4 units)**

Three hours lecture and three hours laboratory. At least one Saturday field trip or equivalent required.
Prerequisite: None.
An introduction to the principles of geology with emphasis on the structure and origin of the earth, its present and past landscapes and the processes at work changing its surface. Includes identification of rocks and minerals, topographic and geologic map exercises demonstrating the work of water, wind, ice and gravity and effects of volcanism and earthquakes. Not open to students with credit in GEOL 10 and 10L or 11.

• **1b HISTORICAL GEOLOGY (4 units)**

Three hours lecture and three hours laboratory.
Prerequisites: GEOL 1a or 10 and 10L, 11.
The principles of the history of the Earth as revealed by fossils, rock structures and strata; the origin and evolution of the plant and animal inhabitants with particular attention to California.

• **6a INTRODUCTION TO MINERALOGY (2 units)**

One hour lecture and three hours laboratory.
Prerequisite: CHEM 2a or equivalent.
Determination of important minerals, their origins and relationships by physical and chemical tests.

• **6b CRYSTALLOGRAPHY (2 units)**

One hour lecture and three hours laboratory.
Prerequisite: GEOL 6a.
Study of the silicate minerals and recognition of the more important forms of the different crystal systems using Dana models and suitable crystal specimens.

• **7 GENERAL PALEONTOLOGY (3 units)**

Two hours lecture and two hours laboratory. At least two Saturday field trips are required.
Prerequisite: A course in geology or biology is strongly recommended.
Covers the development of animal life from the earliest fossil records to now living forms. Laboratory work includes identification, study of form, classification of fossil plants and animals, and methods of collection and preparation of specimens.
• 10 INTRODUCTION TO GEOLOGY (3 units)

Three hours lecture. At least one Saturday field trip or equivalent required.
Prerequisite: None.
An introduction to the principles of geology with emphasis on the structure and origin of the earth, its present and past landscapes and the processes at work changing its surface. Students desiring laboratory experience should either substitute GEOL 1a or enroll in GEOL 10L concurrently with GEOL 10. Not open to students with credit in GEOL 1a.

• 10L INTRODUCTORY GEOLOGY LABORATORY (1 unit)

Three hours laboratory.
Prerequisite: GEOL 10 (preferably taken concurrently).
Exercises planned to accompany the lectures of GEOL 10. Identification of rocks and minerals, topographic and geologic map exercises demonstrating the work of water, wind, ice and gravity and effects of volcanism and earthquakes. Designed for students preparing to teach in the elementary grades and for all non-science majors.

• 12 GEOLOGY OF CALIFORNIA (3 units)

Three hours lecture. One field trip or equivalent required.
Prerequisite: GEOL 10 or 1a.
An elementary course dealing with the geologic history, structure, topography and mineral resources of California and adjoining areas.

• 52a BASIC MINERALOGY (2 units)

One hour lecture and two hours laboratory plus field trips by arrangement.
Prerequisite: None.
The common minerals of the earth, their origin, structure, economic uses, occurrences and identification by physical and chemical tests.

• 52b BASIC PETROLOGY (2 units)

One hour lecture and two hours laboratory plus field trips by arrangement.
Prerequisites: GEOL 52a or 6a, and 1a, or 10, 10a. Continuation of GEOL 52a with emphasis on rock-forming minerals and a systematic study of common rocks of the earth's crust with particular attention to local types.

• 72 INTRODUCTION TO PETROLEUM GEOLOGY (2 units)

Two hours lecture and one hour laboratory.
Prerequisite: GEOL 1a or 10, or 11.
Lectures, demonstrations and problems relating to basic elements of geology, origin of petroleum, migration and entrapment of petroleum, methods of petroleum exploration, formation evaluation, drilling and production and economics.

• 75 WIRELINE WELL LOG ANALYSIS (3 units)

Three hours lecture.
Prerequisite: A basic course in college geology is recommended.
The student will learn to interpret and apply the basic principles of wireline well logging as needed to evaluate subsurface petroleum reservoirs.

90 BIOSTRATIGRAPHY (0 unit)

Seminar.
Prerequisite: None.
Designed for practicing paleontologists, stratigraphers, geologists and geophysicists. Attention is given to current investigations and research in these areas.

INDUSTRIAL DRAWING (IN DR)

• 11 INTRODUCTION TO ARCHITECTURAL DRAWING (3 units)

Six hours lecture and laboratory.
Prerequisite: None.
Introductory course for architectural and technical students. The fundamentals, techniques, procedures and practices of industrial drafting and design. Includes use of drafting equipment and instruments, lettering, linework, basic theory of orthographic projection and dimensioning, freehand detail drawing, pictorial sketching and drawing, sectioning, and auxiliary views.

• 20a COMPUTER ASSISTED DRAFTING AND DESIGN (CADD) (3 units)

Six hours lecture and laboratory.
Prerequisite: IN DR 30b, ARCH 11, or ENGR 24, or equivalent courses and/or experience to be evaluated by the instructor.
An intensive study utilizing a computer assisted drafting and design (CADD) system to obtain graphic solutions, design refinements, modifications, and delineations of industrial, architectural, and engineering drawings. Emphasizes basic high technology skills which are necessary to function as an entry level CADD operator. Field trips required. Offered as IN DR 20 in Spring 1984.

• 20b COMPUTER ASSISTED DRAFTING AND DESIGN (CADD) (3 units)

Six hours lecture and laboratory.
Prerequisite: IN DR 20a.
Continuation of the sequence to utilize the CADD system to obtain graphic solutions, design refinements, modifications, and delineations in working with industrial, architectural, and engineering drawings. Emphasizes basic high technology skills which are necessary to function as an entry level CADD operator. Field trips required. Offered as IN DR 20 in Spring 1984.
• **30a—30b **INDUSTRIAL DRAWING (3—3 units)

Six hours lecture/laboratory.
Prerequisite: 30a or two years of high school drafting with grades of "B" or higher prerequisite to 30b.
Fundamentals of drafting, use of instruments and scales. Lettering, sketching, geometric constructions, orthographic projection and standards of dimensioning. Second semester includes introduction to sectioning, auxiliary views, revolutions and isometric and oblique projections.

• **30c—30d **ADVANCED INDUSTRIAL DRAWING (3—3 units)

Six hours lecture/laboratory.
Prerequisite: IN DR 30b or equivalent.
Advanced work in fundamentals, techniques and conventional practices including secondary auxiliaries, axonometric projections, developments, intersections and gears and cams. Preparation of detailed working drawings, exploded views and assembly drawings. Use of ink. Introduction to reproduction processes. Emphasis on team design work. Field trips are planned to familiarize the student with the drafting environment of large industrial facilities. Airbrush and scratchboard projects are presented for those students interested in developing these skills. This direction would assist students wishing to enter the field of technical illustration.

• **40 **ELECTRONIC DRAFTING (3 units)

Two hours lecture and four hours laboratory.
Prerequisite: IN DR 30a, two years of high school drafting with a grade of "B" or higher, or ELE T 1.
Introduces the various kinds of drawing and drafting techniques used in design and the construction of electronic equipment. Emphasizes concepts of immediate value to the draftsman who may be directly concerned with the electronics industry.

• **51 **PROCESS PIPING DRAFTING (4 units)

Three hours lecture and three hours laboratory.
Prerequisite: IN DR 30a.
Designed to develop knowledge of essential techniques of process piping drafting. Course will serve as a phase of training for those students wishing to become piping draftsman. Content ranges from piping plans, sections, details and includes process flow diagrams and such activities as field trips to a refinery and visiting speakers.

• **53 **PETROLEUM MAP DRAFTING (3 units)

Three hours lecture.
Prerequisite: IN DR 30a or equivalent.
This course is applicable to the petroleum industry, civil engineers, state, city and county surveying offices, and other areas in which knowledge of maps and their preparation is needed.

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54 ADVANCED PETROLEUM MAP DRAFTING (3 units)

Three hours lecture.
Prerequisite: IN DR 30a or equivalent.
An advanced course in petroleum map drafting covering topics not taught in IN DR 53. Care of equipment, air brush coloring, cross sections, specialized map construction, graphs, charts and visual aids, and computer graphics will be included.

**METEOROLOGY**
(METRO)

• **3 **INTRODUCTION TO METEOROLOGY (3 units)

Three hours lecture.
Prerequisite: None.
An introductory course in the physical processes of weather phenomena. Designed to give the student the basic concepts of meteorology, their application to topics of current interest and an analysis of the measurable factors in weather and climate. Basic knowledge for agriculturists, engineers, pilots, elementary and general science teachers. Foundation for further study in meteorology.

**PHYSICAL SCIENCE**
(PHY S)

• **10 **COLLEGE PHYSICAL SCIENCE (3 units)

Three hours lecture.
Prerequisite: None.
Designed for all non-science students and education majors to meet the non-laboratory Physical Science general education requirement. A survey of the basic physical phenomena of mechanics, heat, light, sound, electricity, chemistry, geology, meteorology, and astronomy. Emphasis on basic concepts, relationships, principles and application to modern daily life. Topics are developed with a minimum of mathematical presentation. Not open to science majors.

• **11 **GENERAL PHYSICAL SCIENCE (4 units)

Three hours lecture, two hours laboratory and one hour quiz-demonstration.
Prerequisite: None.
Designed for all non-science students and education majors. Not open to science majors. A survey of the basic physical phenomena of mechanics, heat, light, sound, electricity, chemistry, geology, meteorology and astronomy. Emphasis on basic principles, relationships, status and applications to modern civilization. Topics are developed with a minimum of mathematical presentation.
• 21 SPECIAL PROJECTS IN PHYSICAL SCIENCE (1 unit. Limit 2 units.)

Three hours per week.
Prerequisite: Completion of basic course in science, engineering or drafting with a grade of “C” or higher.
Individual directed work in a science, engineering or drafting area. Individual research problems using materials, equipment and techniques not available in larger classes. Designed for science majors who plan to teach or for training technical students in the vocation of their choice.

• 22 ENGINEERING AND PHYSICS CALCULATIONS (2 units)

Two hours lecture and one hour laboratory.
Prerequisites: Concurrent enrollment in PHYSC 1a and MATH 6a. Students who have completed MATH 6a are not eligible.
The student will learn how to apply mathematical techniques to physical problems; and will set up and solve practical problems requiring calculus methods.

• 35a ROCKS AND MINERALS (1 unit)

Eighteen hours of lecture/laboratory/field trip and projects.
Prerequisite: None.
A study of rocks and minerals with special emphasis for elementary school classroom teachers. Students will learn to identify the major rock-forming minerals and to recognize their relationships as components of the various classes of rocks. From the identification of rocks, recognition of the environmental conditions of deposition will follow. A field trip is required which will permit (1) the examination of the field relationships of various rocks and (2) the beginning of a personal collection of rock and mineral specimens.

• 35b ASTRONOMY (1 unit)

Eighteen hours lecture/planetarium observations.
Prerequisite: None.
A study of fundamental astronomical phenomena emphasizing topics of particular interest to elementary school classroom teachers. Students will observe the appearance and motions of the sun, moon, planets, and stars in the sky and/or in the planetarium. A number of activities and projects for use in instruction in elementary schools will be described and developed.

• 35c WEATHER (1 unit)

Eighteen hours lecture/laboratory/field trip and projects.
Prerequisite: None.
A general survey of local weather conditions and observations to aid elementary school teachers in teaching weather to their students. Special emphasis will be directed to simple answers and explanations for elementary students questions. Easy-to-do and inexpensive experiments will be made to illustrate scientific principles and weather measurements.

• 35d EVERYDAY PHYSICS (1 unit)

Eighteen hours lecture/demonstration/discussion and field trip.
Prerequisite: None.
A survey of the basic principles of physics with special emphasis for elementary school classroom teachers. A format of lecture/demonstrations/discussion will be used to illustrate the application of the basic concepts of physics to everyday events. Students will become familiar with simple apparatus and techniques that they may use in their own classrooms.

• 35e CUP AND SAUCER CHEMISTRY (1 unit)

Eighteen hours of instruction.
Prerequisite: None.
An inexpensive approach to studying chemical happenings with a special emphasis for using at the elementary school level. The course will emphasize a “hands on” approach to doing and developing chemical happenings that may later be used and extended at the elementary level.

• 35f METRIC SYSTEM (1 unit)

Eighteen hours of instruction.
Prerequisite: None.
A study of the metric system with special emphasis for elementary school classroom teachers. Students will learn the metric system. This will include measuring, unit conversion, system conversions and familiarity with derived quantities.
• 35g MAPS (1 unit)

Eighteen hours of instruction.
Prerequisite: None.
A study of map projections and map interpretation with special emphasis for elementary school teachers. Students will learn how maps are made, how information is provided, problems and limitations of maps and how to use and read maps effectively. Students will examine road maps, contour maps, weather maps, relief maps, political maps, stereopair aerial photos and satellite photos.

50 THE DETERIORATING PHYSICAL ENVIRONMENT (3 units)

Three hours lecture/discussion.
Prerequisite: None.
Designed to meet the AA degree Natural Science graduation requirement, and examine our physical needs and environmental limits of air, water, resources, energy, food, pollution, population and life styles. Physical principles will be applied and studied as they relate to the problems, limits and alternative options.

PHYSICS
(PHYSC)

• 1a MECHANICS (4 units)

Three hours lecture and three hours laboratory.
Prerequisite: Concurrent enrollment in MATH 6a. Concurrent enrollment in PHY S 22 recommended.
The first in a four semester sequence of courses designed primarily for engineering, physics and other majors requiring a thorough physics background. Includes vectors, statics, dynamics, kinematics, and the properties of materials. Required of all engineering, physics, and other science majors needing calculus based physics.

• 1b WAVE MOTION AND HEAT (4 units)

Three hours lecture and three hours laboratory.
Prerequisites: PHYSC 1a, MATH 6a and concurrent registration in MATH 6b.
Includes traveling and stationary waves, sound waves, temperature, thermodynamics, the nature and propagation of light, reflection, refraction, polarization, diffraction and optical instruments.

• 1c ELECTRICITY AND MAGNETISM (4 units)

Three hours lecture and three hours laboratory.
Prerequisites: PHYSC 1a, MATH 6b and concurrent registration in MATH 6c (waiver of concurrent registration in 6c may be given by instructor in special cases).
The fundamental concepts and phenomena of electricity and magnetism including electric charge, electric field, electric potential, capacitance, direct current circuits, magnetic field, electromagnetic induction, magnetic properties of matter, electromagnetic oscillations and electromagnetic waves.

• 1d MODERN PHYSICS (4 units)

Three hours lecture and three hours laboratory.
Prerequisite: PHYSC 1c.
Includes study of special relativity, quantum theory and atomic and nuclear physics.

• 2a GENERAL PHYSICS — MECHANICS AND HEAT (4 units)

Three hours lecture, three hours laboratory and one hour problem discussion.
Prerequisites: MATH C, D, (MATH C may be taken concurrently).
Lectures, demonstrations and problems dealing with the properties of matter, mechanics and heat. Emphasis on understanding laws, principles, and theories. Required for most science, pre-medical, and other pre-professional majors.

• 2b GENERAL PHYSICS — SOUND, LIGHT, ELECTRICITY, MAGNETISM, MODERN PHYSICS (4 units)

Three hours lecture, three hours laboratory and one hour problem discussion.
Prerequisites: PHYSC 2a, 11a, or high school physics with a "C" or better, MATH C, D.
Lectures, demonstrations, and problems dealing with the properties of waves, sound, light, electricity, magnetism, atomic and nuclear physics. Emphasis on understanding laws, principles and theories. Required for most science, pre-medical, and other pre-professional majors.

• 10 CONCEPTS IN PHYSICS (3 units)

Three hours lecture.
Prerequisite: One year of high school algebra or equivalent.
For non-science majors only. A survey of the basic laws of physics and their application to modern life. (Formerly PHYSC 50.)

• 11a COLLEGE PHYSICS — MECHANICS, HEAT (4 units)

Three hours lecture, three hours laboratory and one hour discussion.
Prerequisites: MATH A or equivalent with a grade of "C" or better and MATH C, or MATH 53a (may be taken concurrently).
Lectures, demonstrations, and problems dealing with mechanics, heat and properties of matter. Emphasis on application of laws and principles. Required of all technical majors. Not open to students with credit in PHYSC 2a.

• 11b COLLEGE PHYSICS — SOUND, LIGHT, ELECTRICITY, MAGNETISM AND MODERN PHYSICS (4 units)

Three hours lecture, three hours laboratory and one hour discussion.
Prerequisites: PHYSC 2a, 11a, or high school physics with a grade of "C" or better, MATH C or MATH 53a.
Lectures, demonstrations and problems dealing with waves, sound, light, electricity, magnetism and modern physics. Emphasis will be on application of laws and principles. Required of all technical majors. Not open to students with credit in PHYSC 2b.
WATER TECHNOLOGY
(WTR T)

50 INTRODUCTION TO WATER RESOURCES (3 units)

Three hours lecture. At least one field trip to a major water resource project will be made.
Prerequisite: A good knowledge of basic mathematics, especially algebra, will be very helpful.
Includes a survey of the basic sciences necessary to an understanding of water resources, a survey of the uses of water, including water supply, recreation, pollution abatement and flood control, government water agencies and their functions and a review of the California Water Project.

51 BASIC WATER TREATMENT (3 units)

Three hours lecture.
Prerequisite: None.
Basic Water Treatment is designed to prepare the entrance level student for Water Facility Operator Certification, Grades 1 and 2 and/or to inform the interested public in the methodology used for the purification of drinking water.

52 BASIC WATER DISTRIBUTION (3 units)

Three hours lecture.
Prerequisite: None.
Basic Water Distribution is designed to prepare the student to obtain Grade 1 certification from the American Water Works Association and/or to inform interested parties in the methods involved in accepted distribution systems and operations.

53 WATER AND WASTEWATER ANALYSIS (4 units)

Three hours lecture and two hours laboratory.
Prerequisite: High school chemistry or job related experience.
Course designed to prepare the student for certification as a Water Quality Analyst, Grade 1. Lectures will cover environmental influences, composition of natural water, analysis, interpretation of results and application to treatment problems. Laboratory experiments will include those areas which are on the Grade 1 exam, and which are usually the controlling operating tests for water and wastewater treatment plants.

54 BASIC WASTEWATER TREATMENT (3 units)

Three hours lecture. One required field trip.
Prerequisite: None.
Designed to prepare the student for Wastewater Treatment Plant Operator Certification from the State Water Resources Control Board. This course is specifically designed to assist OIT and Grade 1 level personnel but also can help reinforce theories and practices for intermediate level operators as well.

PHYSIOLOGY
See Life Science

POLITICAL SCIENCE
See Social Science-International Education

PSYCHOLOGY
See Behavioral Sciences

PUBLIC SERVICE

Administration of Justice
Correctional Administration
Fire Technology

Programs in the Public Service Department are designed to expose students to different aspects of public safety and service in the criminal justice system and in fire safety service operations. Courses offered are both theoretical and practical.

Students have the option of developing a program suitable to their career needs with the aid of the departmental counselor. Courses taken may include a study leading to specific career goals, immediate employment, associate degree, or transfer courses that lead to the Bachelor of Arts or Science in Criminology, Police Science, Correctional Administration or Fire Technology.

CERTIFICATES OF ACHIEVEMENT

POLICE MANAGEMENT CERTIFICATE PROGRAM

The police management certificate is designed to improve the managerial skills of policemen to the rank of Sergeant and above. The courses in the mid-management field are sufficiently diversified so that the student may take courses which will help in the job held or being sought.
Minimum units required – 51

Requirements:

1. Three years paid law enforcement experience.
2. One of the following:
   A. Thirty units leading to the Associate Degree in Police Science including:
      - ADM J 1 (3) Intro Admin Justice
      - ADM J 2 (3) Concepts Crimin Law
      - ADM J 3 (3) Legal Aspects/Evidence
      - ADM J 4 (3) The Justice System
      - ADM J 5 (3) Community Relations
   B. Sergeant with three years in grade.
   C. Lieutenant or above.
      - Highway Patrolmen may substitute ADM J 73 Gen Ord/Pol CHP.
3. All students must have completed ADM J 5 Community Relations.

Additional Certificate Requirements

Select 9 units from the following:

<table>
<thead>
<tr>
<th>UN</th>
<th>Unit Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>UN</td>
<td>ADM J 16</td>
<td>Superv/Leadership 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>ADM J 58a</td>
<td>Pol Administration 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>ADM J 58b</td>
<td>Pol Administration 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>ADM J 58c</td>
<td>Supervision P.O.S.T. 3.0</td>
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Select 12 units from the following:

<table>
<thead>
<tr>
<th>UN</th>
<th>Unit Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>UN</td>
<td>SPCH 53</td>
<td>Oral/Non Verbal Com 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>MGMT 63</td>
<td>Written Communication 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>OR</td>
<td>Administrative Law 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>MGMT 64</td>
<td>Fund Public Admin 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>BUS 58</td>
<td>Human Relat/Motivat 3.0</td>
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<tr>
<td>UN</td>
<td>MGMT 66</td>
<td>Prin Organiz/Mgmtnt 3.0</td>
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<tr>
<td>UN</td>
<td>MGMT 59</td>
<td>Personnl Managmnt 3.0</td>
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<tr>
<td>UN</td>
<td>MGMT 67</td>
<td>Fund Fiscal Admin 3.0</td>
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</table>

FIRE TECHNOLOGY CERTIFICATE PROGRAM

Minimum units required – 30

Required Courses

<table>
<thead>
<tr>
<th>UN</th>
<th>Unit Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>UN</td>
<td>FI TC 1</td>
<td>Int Fire Technology 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>FI TC 2</td>
<td>Pers Sfty/Emrg Actn 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>FI TC 3</td>
<td>Fund Fire Protectn 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>FI TC 4</td>
<td>Fire Bhavior/Contrl 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>FI TC 5</td>
<td>Fund Fire Prvention 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>FI TC 6</td>
<td>Fire Pro Eqpmnt/Syst 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>ENGL</td>
<td>(Engl 60 or 1 or 1a) 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>PSYCH</td>
<td>(Psych 51 or 1a) 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>SPCH</td>
<td>(Spch 51 or 1) 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>EMT</td>
<td>Emergency Med Care 4.0</td>
</tr>
</tbody>
</table>

NOTE: FI TC 1 is waived for students who have a minimum of two years service as a full time firefighter or who have an equivalent course. FI TC 2 is waived for students who are full time firefighters. Elective Fire Technology courses may be substituted for courses waived. A G.P.A. of at least 2.0 is required in the Certificate Program. Of the 30 units required, a minimum of 12 units must be completed at Bakersfield College.

FIRE OFFICER I CERTIFICATION (NFPA STANDARD 1021)

Minimum units required – 24

Required Courses

<table>
<thead>
<tr>
<th>UN</th>
<th>Unit Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>UN</td>
<td>FI TC 70q</td>
<td>Fire Mgt 1a 2.0</td>
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<tr>
<td>UN</td>
<td>FI TC 70r</td>
<td>Fire Command 1a 2.0</td>
</tr>
<tr>
<td>UN</td>
<td>FI TC 70s</td>
<td>Fire Command 1b 2.0</td>
</tr>
<tr>
<td>UN</td>
<td>FI TC 70t</td>
<td>Fire Prevent 1a 2.0</td>
</tr>
</tbody>
</table>

ASSOCIATE OF ARTS DEGREE PROGRAMS

Students must comply with the requirements as shown in the catalog under Graduation Requirements. Counselors/advisors will assist students in planning for an associate degree.

ADMINISTRATION OF JUSTICE

This program provides a course of study to prepare students for employment in private or public agencies which are wide and varied. Students may choose between occupational objectives, Associate of Arts Degree, and/or Baccalaureate Degree.

Minimum units required – 18

Required Courses

<table>
<thead>
<tr>
<th>UN</th>
<th>Unit Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>UN</td>
<td>ADM J 1</td>
<td>Intro Admin Justice 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>ADM J 2</td>
<td>Criminal Law 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>ADM J 3</td>
<td>Criminal Evidence 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>ADM J 4</td>
<td>The Justice System 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>ADM J 5</td>
<td>Community Relations 3.0</td>
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Recommended for Associate Degree

<table>
<thead>
<tr>
<th>UN</th>
<th>Unit Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>UN</td>
<td>ADM J 11</td>
<td>Juvenile Procedure 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>ADM J 12</td>
<td>Prob/Phys Evidence 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>ADM J 13</td>
<td>Criminal Investig 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>ADM J 14</td>
<td>Patrol Procedures 3.0</td>
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Recommended for CSUC

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<thead>
<tr>
<th>UN</th>
<th>Unit Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>UN</td>
<td>ADM J 17</td>
<td>Traffic Control 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>ADM J 12</td>
<td>Prob/Phys Evidence 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>PSYCH 1a</td>
<td>General Psychology 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>SOC 1</td>
<td>Intro Sociology 3.0</td>
</tr>
<tr>
<td>UN</td>
<td>SOC 7</td>
<td>Juvenile Delinquency 3.0</td>
</tr>
</tbody>
</table>
CORRECTIONAL ADMINISTRATION

Corrections is that part of the criminal justice system that deals with both juveniles and adults who have been charged with or convicted of a criminal offense. It involves working with the individual at the local, state, or federal level of government. Corrections subscribes to the philosophy of protecting society and aiding in the rehabilitation of the offender. The Correctional Administration Program is designed to expose the student to different aspects of the correctional system.

Minimum Units Required — 18

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>COR A 1</td>
<td>Instr Corrntl Admin</td>
<td>3.0</td>
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<tr>
<td>COR A 2</td>
<td>Instit Sup/Offender</td>
<td>3.0</td>
</tr>
<tr>
<td>COR A 3</td>
<td>Fund Intvwng Consling</td>
<td>3.0</td>
</tr>
<tr>
<td>COR A 4</td>
<td>Fund Probatt Parole</td>
<td>3.0</td>
</tr>
<tr>
<td>COR A 7</td>
<td>Juvenile Delinquency</td>
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<tr>
<td>SOC or PSYCH</td>
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**Suggested Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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<tbody>
<tr>
<td>ADM J 2</td>
<td>Criminal Law</td>
<td>3.0</td>
</tr>
<tr>
<td>ADM J 3</td>
<td>Criminal Evidence</td>
<td>3.0</td>
</tr>
<tr>
<td>ADM J 4</td>
<td>The Justice System</td>
<td>3.0</td>
</tr>
<tr>
<td>ADM J 13</td>
<td>Criminal Investig</td>
<td>3.0</td>
</tr>
</tbody>
</table>

FIRE TECHNOLOGY

The Fire Technology program is designed for pre-service, employed Fire Service students (in-service training), and for transfer students in the fields of Fire Protection Administration, Fire Protection Engineering, and other related fields of study.

Minimum Required units — 18

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI TC 1</td>
<td>Intr to Fire Technology</td>
<td>3.0</td>
</tr>
<tr>
<td>FI TC 2</td>
<td>Pers/Sfty/Emrg Actn</td>
<td>3.0</td>
</tr>
<tr>
<td>FI TC 3</td>
<td>Fund Fire Protection</td>
<td>3.0</td>
</tr>
<tr>
<td>FI TC 4</td>
<td>Fund Fire Bhavior Cntl</td>
<td>3.0</td>
</tr>
<tr>
<td>FI TC 5</td>
<td>Fund Fire Prevention</td>
<td>3.0</td>
</tr>
<tr>
<td>FI TC 6</td>
<td>Fire Pro Eqpmnt Syst</td>
<td>3.0</td>
</tr>
</tbody>
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COURSE DESCRIPTIONS

ADMINISTRATION OF JUSTICE (ADM J)

**1 INTRODUCTION TO ADMINISTRATION OF JUSTICE (3 units)**

Three hours lecture.
Prerequisite: None.
The history and philosophy of administration of justice in America; recapitulation of system; identifying the various sub-systems, role expectations, and their inter-relationships; theories of crime, punishment, and rehabilitation; ethics, education and training for professionalism in the system.

**2 CONCEPTS OF CRIMINAL LAW (3 units)**

Three hours lecture.
Prerequisite: None.
Historical development, philosophy of law and constitutional provisions; definitions, classification of crime, and their application to the system of administration of justice; legal research, study of case law, methodology and concepts of law as a social force.

**3 LEGAL ASPECTS OF EVIDENCE (3 units)**

Three hours lecture.
Prerequisite: None.
Origin, development, philosophy and constitutional basis of evidence; constitutional and procedural considerations affecting arrest, search and seizure; kinds of degrees of evidence and rules governing admissibility; judicial decisions interpreting individual rights and case studies.

**4 THE JUSTICE SYSTEM (3 units)**

Three hours lecture.
Prerequisite: None.
An in-depth study of the role and responsibilities of each segment within the Administration of Justice System: law enforcement, judicial, corrections. A past, present and future exposure to each sub-system procedures from initial entry to final disposition and the relationship each segment maintains with its system members.
• 5 COMMUNITY RELATIONS (3 units)

Three hours lecture.
Prerequisite: Non.
An in-depth exploration of the roles of the Administration of Justice practitioners and their agencies. Through interaction and study the student will become aware of the interrelationships and role expectations among the various agencies and the public. Principal emphasis will be placed upon the professional image of the Administration of Justice system and the development of positive relationships between members of the system and the public. Also includes the role of the police in the community actions of the field police officer in the area of press relations, minority group relations and public information.

• 11 JUVENILE PROCEDURES (3 units)

Three hours lecture.
Prerequisite: None.
The organization, functions and jurisdiction of juvenile agencies; the processing and detention of juveniles; juvenile case disposition; juvenile statutes and court procedures.

• 12 PROBLEMS OF PHYSICAL EVIDENCE (3 units)

Three hours lecture and assigned field trips.
Prerequisite: None.
The collection, identification, preservation and transportation of physical evidence found at crime scenes. The use of photography, molds, casts and moulage masks to preserve evidence. Sketching and photography to locate evidence as found. Fingerprint examinations and preservation of prints. Footprints, tool mark impressions, identification of handwriting and typewriting. Firearms identification. Importance of hair, fibers, dust and blood as evidence. Importance of laboratory examination and discussion of available facilities.

• 13 CRIMINAL INVESTIGATION (3 units)

Three hours lecture.
Prerequisite: None.
Fundamentals of investigation, crime scene search and recording, collection and preservation of physical evidence, scientific aids, modus operandi, sources of information, interviews and interrogation, follow-up and case preparation.

• 14 PATROL PROCEDURES (3 units)

Three hours lecture.
Prerequisite: None.
Responsibilities, techniques and methods of police patrol.

• 15 ARREST, SEARCH AND SEIZURE (3 units)

Three hours lecture.
Prerequisite: None.
Admissibility of evidence and confessions; recent judicial decisions affecting law enforcement; the problem of reconciling individual rights and community interests in safety, security and the prevention of crime.

• 16 SUPERVISION AND LEADERSHIP (3 units)

Three hours lecture.
Prerequisite: None.
A consideration of the basic principles of supervision designed to develop future leaders in law enforcement.

• 17 TRAFFIC CONTROL (3 units)

Three hours lecture/discussion.
Prerequisite: None.
The historical development of traffic control and supervision and its relationship to the integration of engineering, enforcement and education efforts as they relate to the safe, convenient and economical transportation of persons and goods. Provided is a survey of fundamentals of traffic engineering, traffic directing, traffic law and enforcement and traffic accident investigation and the relative importance of each.

• 18 BEHAVIORAL CONCEPTS FOR POLICE OFFICERS (3 units)

Three hours lecture.
Prerequisite: None.
The student will understand practical psychology in terms of tools and techniques applicable to law enforcement. The course is designed to aid student's understanding of himself and others operating under psychological stress. Included are: realities and psychological effects of the police role; psychological aspects within law enforcement and the community; psychology as applied to field situations; development of potential and personal growth.

50 INTRODUCTION TO ORGANIZED CRIME (3 units)

Three hours lecture.
Prerequisite: None.
Introduces students to organized crime. Includes, but is not limited to, a history of organized crime (especially the Mafia) from its genesis to the present; its past and present structure; an overview of its operations, its sphere of influence into every facet of American life—social, political and financial; and what various law enforcement agencies are doing to combat organized crime.
53 INDUSTRIAL SECURITY (3 units)
Three hours lecture/discussion.
Prerequisite: None.

55a—55b—55c—55d CAMPUS POLICE (1—1—1—1 unit)
One hour lecture.
Prerequisite: ADM J Major; concurrent enrollment or satisfactory completion of ADM J 1; grade point average of 2.0.
Designed to develop students' understanding of various aspects of community college campus security and provide campus security experience. Spanning a period of four semesters, the student will progress from simple concepts (55a) to the more complex aspects of campus law enforcement and security (55d). Content will include: selection process, campus police historical development, role of campus student officer, surveillance, reporting and law enforcement agency ride-along.

56 ADVANCED CRIMINAL INVESTIGATION (3 units)
Three hours lecture.
Prerequisite: None.
An advanced investigations course dealing with specific problems of the crime scene investigator. Primarily concerned with the problems of physical evidence at the scene of the robbery, burglary and homicide investigation.

57 RETAIL BUSINESS SECURITY (3 units)
Three hours lecture/discussion.
Prerequisite: None.
Designed primarily for key personnel of small and medium size retail businesses. It will cover methods of protection against crimes common to these businesses, and the laws pertaining to the apprehension and judicial processing of persons committing such crimes.

58a POLICE ADMINISTRATION (3 units)
Three hours lecture.
Prerequisite: None.
The organization and management of patrol, traffic, detective, juvenile and vice units; formulation of policy and procedure; rules and regulations; deployment; implementation of procedural and tactical planning; coordination of activity.

58b POLICE ADMINISTRATION (3 units)
Three hours lecture.
Prerequisite: None.
Examination of current problems and trends in police organization and management, planning and research, fiscal problems, administration of a comprehensive personnel program.

58c SUPERVISION COURSE (P.O.S.T.) (3 units)
Eighty hours lecture/discussion/practical application.
Prerequisite: ADM J 68 or equivalent.
Covers basic concepts of police supervision and management, functions of police supervision and principles of training. Elements of supervision, leadership, motivation, communication, personnel evaluation and techniques of counseling are emphasized.

60 DEATH INVESTIGATION (3 units)
Three hours lecture/demonstration/discussion.
Prerequisite: None.
Designed primarily for law enforcement personnel, coroner investigators and administration of justice majors. Covers the various legal classifications of death; the proper procedures for handling and disposing of bodies; how, why autopsies are performed; and the identity of the agencies responsible for death investigations. Much broader but more basic than courses on homicide investigation.

61 EVIDENCE AND THE LABORATORY (3 units)
Three hours lecture/demonstration/discussion.
Prerequisite: None.
Introduction to the field of criminalistics; the role of the laboratory in the administration of justice system; degrees and limits of scientific conclusions; introduction to technical equipment; examination of characteristics, properties and means of analyzing categories of physical evidence. An orientation course for crime scene and laboratory technology.

65 FIREARMS (1 unit)
Eighteen hours lecture/laboratory.
Prerequisite: None.
Designed for students desiring to become familiar with firearms safety and use. Students will receive instruction in the legal, moral, ethical, and safe use of firearms as well as in marksmanship. Includes range qualification in marksmanship.

67ab RESERVE OFFICERS' BASIC TRAINING (4 units)
One hundred-fifteen hours lecture and practical exercises.
Prerequisite: None.
Designed to prepare the trainee for the performance of reserve officers' duties 67a covers forty hours (2 units) of professional ethics, discretionary decision making, arrest, search and seizure and firearms. 67b covers seventy-five hours (2 units) of professional orientation, community relations, communications, emergency care, custody, traffic control and patrol tactics and strategy. 67ab meets Level II and III Reserve Officers' training requirements pursuant to Penal Code Section 832.6.
67c RESERVE OFFICERS' BASIC TRAINING (3 units)

One hundred-fifteen hours lecture and practical exercises.
Prerequisites: ADM J 67ab or 74ab and 67b or equivalent.
Designed to prepare the trainee for the performance of reserve officers' duties. Subjects covered are: Criminal evidence and law, criminal investigation, patrol procedures, physical fitness and defensive techniques, and vehicle operations. This course, coupled with ADM J 67ab, fulfills training requirements for Level I Reserve Officers in accordance with Penal Code 832.6 and P.O.S.T. regulations.

68 PEACE OFFICERS' BASIC TRAINING (12 units)

Five hundred-thirty-six hours lecture/behavioral performance.
Forty hours per week for approximately thirteen weeks.
Prerequisite: Admission to Peace Officers' Basic Training Program requires each student to have a high school diploma or its equivalent, achieve a score of 60 on the Minnesota Reading Assessment Test (Form A), be free of a felony conviction, and physically fit to participate in all phases of training.
Training provides intensive basic instruction designed to prepare trainee for the performance of peace officers' duties. The course covers introduction to law enforcement, administration of justice, criminal law, evidence and investigation, community-police relations, patrol procedures, traffic control, juvenile procedures, physical fitness, defensive tactics, firearms, first aid, vehicle operations and field training and evaluation.

70a BASIC POLICE PHOTOGRAPHY (1 unit)

Twenty hours instruction.
Prerequisite: ADM J 68 or equivalent.
Teaches use of available photographic equipment in police assignments, what can be accomplished by proper photographic techniques in various police situations and how to use photographic results in both investigation and court situations.

70b FINGERPRINTING (2 units)

Forty hours instruction.
Prerequisite: ADM J 68 or equivalent.
Covers history, classification and use of fingerprints.

70c LAW ENFORCEMENT VISUAL SURVEILLANCE (1.5 units)

Thirty-two hours instruction.
Prerequisite: None.
A self-improvement course designed to develop visual perception and performance and to provide understanding of the visual process and its importance in Police Science.

70d RULES OF EVIDENCE (1 unit)

Twenty hours instruction.
Prerequisite: ADM J 68 or equivalent.
Covers admissibility, weight, relevancy, materiality and competency of evidence; impeachment of a witness, judicial notice, burden of proof, presumption, hearsay, exception to the hearsay rule and other pertinent rules. Course designed for advanced officers.

70e CONSTITUTIONAL LAW (1 unit)

Twenty hours instruction.
Prerequisite: ADM J 68 or equivalent.
Covers history and development of the U.S. Constitution, the exclusionary rule; history and development of the California Constitution. Relationship of Constitutional guarantees to rules governing probably cause for arrest. Course designed for advanced officers.

70f SEARCH AND SEIZURE (1 unit)

Twenty hours instruction.
Prerequisite: ADM J 68 or equivalent.
Deals with constitutional protection of fourth amendment, search of the person, search of premises, search of motor vehicle, what is not a search, current court decisions. Course designed for advanced officers.

70g LAWS OF INTERVIEWING (1 unit)

Twenty-four hour instruction.
Prerequisite: ADM J 68 or equivalent.
Covers laws related to interviews with suspects, United State Supreme Court's interpretation, interviewing problems, post Miranda, stop and inquire — stop and frisk. Course designed for advanced officers.

70h CURRENT LEGAL PROBLEMS (1 unit)

Twenty hours instruction.
Prerequisite: ADM J 68 or equivalent.
Current legal problems based upon training films from prosecuting attorney of L.A. County. Classes given at law enforcement departments throughout Kern County.

70i POLICE REPORT WRITING (1 unit)

Twenty hours instruction.
Prerequisite: ADM J 68 or equivalent.
The writing of various types of police reports. Course is designed for the new officer and the experienced officer who may have trouble writing reports.
704 + 77
Hours and units
70j NARCOTICS INVESTIGATIONS (4 units)

Eighty hours lecture, discussion and practical application.
Prerequisite: ADM J 68 or equivalent.
The student will develop the knowledge and skills necessary to investigate narcotics offenses. Includes investigator’s function/duties, pre-case development, drug and user identification, related drug enforcement laws, undercover and surveillance techniques, entry and search strategy, search warrants, licitantes, smuggling, conspiracy, and clandestine laboratory investigation.

70k ADMINISTRATION OF JUSTICE (1 unit)

Twenty hours instruction.
Prerequisite: ADM J 68 or equivalent.
Procedures of criminal justice; court systems both California and Federal Government; laws of arrest; pre-trial and trial procedures. Designed for upgrading currently employed police officers.

70l POLICE COMMUNITY RELATIONS (1 unit)

Twenty hours instruction.
Prerequisite: ADM J 68 or equivalent.
Explores role of individual officer, the police image, crises areas, minority groups and law enforcement and the press.

70m PHYSICAL EVIDENCE TECHNOLOGY (1 unit)

Twenty hours instruction.
Prerequisite: ADM J 68 or equivalent.
Covers commonly encountered types of physical evidence, laws of probability as applied to physical evidence, collection and preservation of evidence, and latest evidence technology.

70n HOMICIDE INVESTIGATION (2 units)

Forty hours lecture and practical problems.
Prerequisite: ADM J 68 or equivalent.
Covers law of evidence, arrests, search and seizure, court presentation. Designed for experienced officers.

70o CURRENT INVESTIGATIVE TECHNIQUE (1 unit)

Twenty hours instruction.
Prerequisite: ADM J 68 or equivalent.
Designed for in-service law enforcement officers who are preparing to enter the investigation field or are currently investigators and wish to update their investigative expertise with current technological developments.

70p TRAFFIC SURVIVAL THEORY (0.5—1 unit)

Eight to sixteen hours lecture/discussion.
Prerequisite: ADM J 1 or its equivalent.
The student, as an instructor of those individuals referred to traffic survival school resulting from driving under the influence, will better understand ways to prevent repeated offenses. Includes concepts of driving under the influence avoidance techniques; theories and methodologies of group counseling and interaction; techniques of teaching and course content development.

70q JAIL OPERATIONS (2—4 units)

Forty to eighty hours lecture and practical demonstration.
Prerequisite: None for eighty hour format; ADM J 68 for forty hour format.
This P.O.S.T. certificated course is offered in either a forty or eighty hour format. The forty hour format consists of jail operations in terms of correctional history and philosophy, legal considerations, communications, security and emergency procedures, special inmates, and inmate attitudes, behavior, supervision, discipline, and correctional programs. The eighty hour format, in addition covers, report writing, evidence handling, judicial procedures, courtroom demeanor and defensive tactics. The forty hour format in conjunction with ADM J 68 or the eighty hour format satisfies Board of Corrections training requirements for jail personnel pursuant to its regulation Sub-chapter 4, Section 1020.

70r ADVANCED LATENT FINGERPRINTS (2 units)

Forty hours lecture/laboratory.
Prerequisite: Completion of ADM J 70b or its equivalent.
Designed to provide the student with practical experience in developing, photographing and lifting latent fingerprints. Consideration is given to special problems associated with latent prints, collection and comparison of latent prints at crime scenes, court preparation and expert testimony, and organization and planning of identification bureau and latent files.

70s SAFETY PERSONNEL FIRST AID (1 unit)

Eighteen hours of instruction and practical demonstration.
Prerequisite: None.
First aid and cardio-pulmonary resuscitation designed for those involved in public safety activities. Prepares the student to recognize and render assistance to the ill or injured in the following emergency situations: airway obstruction, respiratory arrest, cardiac arrest, severe bleeding, suspected or actual fractures, and life-threatening environmental circumstances. Also included are: emergency childbirth, care of suspected poisoning, care of emotionally disturbed, simple extrication from entrapment, and transportation of the ill and injured.
70t BATON TRAINING (1 unit)
Sixteen hours of lecture and practical demonstration.
Prerequisite: None.
This course is designed for those involved in various facets of security and law enforcement activities where the use of a baton may be necessary. It is designed to provide the student with the legal and moral aspects of baton use as a means of force, baton familiarization and uses, and first aid techniques for baton injuries. Also provided is practical demonstration of stances, grips, critical target areas, defensive, control and arrest techniques of baton usage.

70u CHEMICAL AGENTS (0.5 unit)
Eight hours lecture/demonstration.
Prerequisite: None.
A comprehensive coverage of different types of chemical agents and their usage as a humane and effective means of handling limited number of enforcement control problems. Identification, characteristics, reactions, hazards as well as strategy for use are stressed. This course is designed to meet California Penal Code instructional requirements for possession and use of chemical agents by enforcement personnel of various classifications.

70v BOMB INVESTIGATION (1 unit)
Twenty-four hours lecture and practical demonstration.
Prerequisite: ADM J 68 or equivalent.
Designed to improve the knowledge and skills of those who may respond to bomb threats and incidents. Covers bombing problems in the United States, bomb data programs, explosive and incendiary devices, bomb threats and incidents, practical demonstrations of explosive and incendiary devices, and bomb crime scene investigation.

70w WEAPONLESS DEFENSE AND CONTROL (1 unit)
Twenty hours lecture and practical demonstration.
Prerequisite: None.
Designed for those involved in situations where physical resistance and personal attack may be encountered. Although established principles of hand-to-hand combat are used this course is not patterned after any particular school of self-defense. Techniques are confined to relatively simple, practical, and effective ways of handling situations confronting the students, particularly law enforcement officers.

70x TRAFFIC ACCIDENT INVESTIGATION (2 units)
Forty hours lecture and practical demonstration.
Prerequisite: ADM J 68 or equivalent.
Assists the student in developing his/her ability to investigate traffic accidents and issue notices of violations for non-viewed misdemeanor and/or infraction offenses. Covers traffic accident reporting requirements, integrated records system, primary collision violations, investigation procedures, report writing and practical application.

70y AGENCY OPERATIONAL PROCEDURES (3-4 units)
Eighty to one hundred and twenty hours lecture and practical demonstration.
Prerequisite: ADM J 68 or its equivalent.
Covers departmental policies and procedures, governmental procedures, internal investigation, communications, general investigation procedures, preliminary investigation procedures, and juvenile procedure. It is designed to develop the student’s ability and skills to perform departmental operational activities. The 120 hour course (4 units) involves expanded communications and investigative procedures as well as community relations and booking procedures.

70z FIELD TRAINING OFFICER (2 units)
Eight hours lecture.
Prerequisite: ADM J 68 or equivalent.
Designed to prepare students for the performance of field training officer’s duties. Content includes importance of the field training officer concept, leadership and decision making, field training officer’s role, and training and evaluation techniques.

71a CIVIL PROCEDURES (2 units)
Forty hours lecture.
Prerequisite: ADM J 68 or equivalent.
Covers civil processes and procedures. Designed to give police officers, deputy sheriffs, marshals, constables, judicial officials and others performing civil duties knowledge which will help them be more effective in their job.

71bc ADVANCED OFFICER TRAINING (P.O.S.T.) (1-1-1-1 unit)
Twenty to forty hours lecture and practical exercises.
Prerequisite: ADM J 68 or equivalent.
Designed to provide updating and refresher training for those who have an interest in law enforcement. A twenty to forty hour variable format is provided for flexibility in course content to meet identified needs. 71b covers twenty hours (1 unit) of recent law enforcement innovations, contemporary legal problems, police-community relations and crisis management. 71c covers twenty-four hours (1 unit) of general law enforcement subjects such as: domestic violence, child abuse, rape and criminal investigations, sex crimes, victimization, defense tactics, firearms, first-aid and defensive driving. 71b and 71c in combination is equivalent to the forty hour 71bc two-unit course. Each section may be taken four times for credit.

71d TELECOMMUNICATOR TRAINING (4 units)
Eighty hours lecture and practical exercise.
Prerequisite: None.
The student will better understand all aspects of telecommunication in a Public Safety communications center. Content includes: role of dispatcher, basic concepts of criminal law, telephone complaint procedures, radio-teletype operations, radio dispatching procedures, report writing, fundamentals of patrol tactics, and simulated dispatching exercises.
74ab FIREARMS AND ARREST, SEARCH AND SEIZURE (P.O.S.T.) (2 units)

Forty hours lecture.
Prerequisite: None.
Designed to satisfy the curriculum standards of the Commission on Peace Officers Standards and Training as required by Penal Code Section 832 for officers; includes laws of arrest, search and seizure, methods of arrest, discretionary decision making and where applicable firearms. Mandatory for all peace officers who do not possess a basic certificate awarded by the Commission on Peace Officer Standards and Training. 74a covers firearms. 74b covers arrest, search and seizure. This course, with a slight change in emphasis, is also designed to fulfill the training requirements for persons employed in private patrol as required by Business and Professions Code, SECT. 7514.1 and 7514.2.

75a EXERCISING THE POWERS TO ARREST (1 unit)

Twenty hours lecture.
Prerequisite: None.
Designed for private security personnel. Meets the requirements as mandated by the Department of Consumer Affairs of the State of California. Students will be instructed on laws of arrest and rules concerning search and seizure with emphasis placed on these as they affect private security. Students will also receive instruction in ethics, community relations and communication.

77 SEARCH AND RESCUE (2 units)

Forty hours lecture and practical exercises.
Prerequisite: Completion of ADM J 68 or equivalent.
Designed to develop supervisory and leadership qualities of those persons interested in and/or responsible for search and rescue functions. Covers how to plan, organize, and manage effective search and rescue activities; search and rescue activities resource identification, functions, and limitations, clue detection, search mission suspension, preventative programs; and inter-agencies relationships.

78 DEFENSIVE TACTICS (2 units)

Three hours lecture, demonstration and practice.
Prerequisite: None.
History and theory of self-defense as applied to law enforcement, techniques of control, searching and handcuffing. Emphasizes using control techniques which avoid injury to subject and policemen.

80a FIRE INVESTIGATION 1 (2 units)

Forty hours lecture and practical exercises.
Prerequisite: Completion of ADM J 68 or equivalent.
Designed for police investigators to successfully carry out their responsibilities in arson detection and explosives investigation. The course covers essential elements of fire and explosives behaviors, types and use of laboratory services, and investigative responsibilities of an investigator at scene of arson and explosives incidents. This course meets P.O.S.T. certification requirements. Not open to students with credit in FI TC 70v.

80b FIRE INVESTIGATION 2 (2 units)

Forty hours lecture and manipulative exercises.
Prerequisite: FI TC 80a or ADM J 80a.
Designed to prepare arson investigators on essential techniques of criminal investigation. Course will serve as a phase of training for those arson investigators who must conduct criminal investigations to a conclusion in a court of law. Content ranges from the criminal law, search and seizure, and includes laboratory services and such activities which may be an aid to criminal investigation. Not open to students with credit in FI TC 80b.

CORRECTIONAL ADMINISTRATION
(COR A)

• 1 INTRODUCTION TO CORRECTIONAL ADMINISTRATION (3 units)

Three hours lecture.
Prerequisite: None.
A survey of the historical, theoretical and philosophical explanations of criminal behavior. The judicial system and its relationship to the criminal offender as well as modern techniques of controlling crime. Surveys the correctional field with emphasis on treatment and rehabilitation methods and facilities.

• 2 INSTITUTIONAL SUPERVISION OF OFFENDERS (3 units)

Three hours lecture.
Prerequisite: None.
Surveys the basic knowledge and skills required of a corrections worker including supervision of inmates, security procedures, enforcement of institutional rules and procedures and other policies and procedures relating to correctional supervision. Designed primarily for the pre-service student and in-service personnel with less than one year of experience.

• 3 FUNDAMENTALS OF INTERVIEWING AND COUNSELING (3 units)

Three hours lecture.
Prerequisite: None.
A survey of the basic theories and techniques employed in interviewing and counseling by the correctional worker; traces the development of a meaningful relationship between client and caseworker; explores the various types of counseling employed with a correctional relationship, including group counseling.

• 4 FUNDAMENTALS OF PROBATION AND PAROLE (3 units)

Three hours lecture.
Prerequisite: None.
Theory and techniques of probation and parole supervision in the State of California, including historical development, with emphasis on decision making by the correctional officer.
• 7 JUVENILE DELINQUENCY (3 units)

Three hours lecture.
Prerequisite: SOC 1 or PSYCH 1a.
A course for students, parents, social workers and teachers pertaining to the problems of the maladjusted juvenile, ranging in type from the potential delinquent to the institutionalized offender. Not open to students with credit in SOC 7.

52 CORRECTIONAL OFFICER BASIC TRAINING (3 units)

Fifty-three hours lecture.
Prerequisite: None.
Covers a number of basic training subjects designed to develop understanding and working knowledge of the duties and responsibilities of the correctional officer.

60a CRIMINAL EVIDENCE FOR CORRECTIONAL WORKERS (1 unit)

Two hours lecture per week for nine weeks.
Prerequisite: None.
Areas covered will be the kinds and degrees of evidence utilized by the individual in his role of Correctional Worker, including the rules governing the admissibility of evidence in court.

60b INTERVIEWING TECHNIQUES, CORRECTIONAL PERSONNEL (0.5 unit)

Eight hours lecture/discussion.
Prerequisite: None.
Designed to provide the student with a basic understanding of key elements of the interviewing process. Included in the course are: definition and purpose of interviews, importance of interviewer and interviewee relationships, communication process, questions formulations, probes and interview termination.

60c GROUP COUNSELING TECHNIQUES FOR CORRECTIONAL PERSONNEL (1 unit)

Two hours per week per week for nine weeks.
Prerequisite: None.
For in-service correctional or related agency personnel, designed from a group leader's point of view, to trace the development of a group from the first through later meetings. Examines resources, skills and techniques necessary to become a group leader.

60d JUVENILE INSTITUTIONAL STAFF ORIENTATION (SECURITY) (1 unit)

Two hours lecture/discussion per week per week for nine weeks.
Prerequisite: None.
An in-service course designed to orient and train new juvenile institutional line and/or staff personnel, and to develop the expertise and create a reawarness of currently employed personnel in selected topic areas.

60e MENTALLY ILL OFFENDER (1 unit)

Sixteen hours lecture.
Prerequisite: None.
Designed to develop the students' understanding of how to deal with mentally ill offenders on a professional basis. Included are: definition of social deviance, basic psychopathology, psychoactive medication, psychiatric treatment alternatives, dangerous behavior prediction, major forensic issues, and effective use of psychological consultation.

61 CORRECTIONAL LAW (3 units)

Three hours lecture per week.
Prerequisite: None.
Designed to familiarize students with the Penal Code Sections and case law related to the control of prisoners in various state correctional facilities; crimes committed by prisoners; crimes committed by visitors and civilian employees; arrest, search and seizure procedures governing prisoners in correctional institutions.

FIRE TECHNOLOGY (FI TC)

• 1 INTRODUCTION TO FIRE TECHNOLOGY (3 units)

Three hours lecture/discussion/demonstrations.
Prerequisite: None.
A general introduction to Fire Technology; career opportunities in fire protection and related fields; history of fire protection; fire loss analysis; public, quasi-public and private protection functions; fire chemistry and physics. (Formerly FI SC 51.)

• 2 FUNDAMENTALS OF PERSONAL FIRE SAFETY AND EMERGENCY ACTION (3 units)

Three hours lecture/discussion/demonstrations.
Prerequisite: None.
Designed to provide career directed students, homeowners, and family members in basic skills in assessing fire dangers, handling common fire situations in the home and/or industry, basic Cardio-Pulmonary Resuscitation and Standard First Aid.

• 3 FUNDAMENTALS OF FIRE PROTECTION (3 units)

Three hours lecture/discussion/demonstrations.
Prerequisite: None.
Theory and fundamentals of fire protection, including fire protection laws, water systems and public fire protection systems, fire protection in buildings, open areas and specific occupancies. (Formerly FI SC 52.)

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• 4 FUNDAMENTALS OF FIRE BEHAVIOR AND CONTROL (3 units)

Three hours lecture/discussion/demonstrations.
Prerequisite: FI TC 1 or equivalent.
Theory and fundamentals of how and why fires start and spread and how they are controlled; an in-depth study of fire chemistry and physics, fire hazard characteristics of materials; techniques of fire control; extinguishing agents.

• 5 FUNDAMENTALS OF FIRE PREVENTION (3 units)

Three hours lecture/discussion/demonstrations.
Prerequisite: FI TC 1 or equivalent.
Organization and function of fire prevention; inspections; surveying and mapping procedures; recognition of fire and life hazards; engineering a solution of a fire hazard; enforcing the solution of a fire hazard; public education aspects of fire prevention. (Formerly FI SC 53.)

• 6 FIRE PROTECTION EQUIPMENT AND SYSTEMS (3 units)

Three hours lecture/discussion/demonstrations.
Prerequisite: FI TC 3 or equivalent.
A study of portable fire extinguishing equipment; protection systems for special hazards; sprinkler systems; fire detection and alarm systems; standpipe systems; heat and smoke control systems; water supplies and systems for interior protection. (Formerly FI SC 69.)

70e AUTO EXTRICATION (1 unit)

Eighteen hours lecture/discussion and manipulative exercises.
Prerequisite: None.
Designed to provide students with knowledge and skills necessary to perform various vehicle rescues involving trapped victims. Content contains a systematic approach to vehicle rescue, and the use of mechanical and hand tools used in the extrication process.

70f SWIFT WATER RESCUE (1.5—1.5—1.5 units)

Thirty hours lecture and manipulative exercises.
Prerequisite: None.
Designed to provide students with basic techniques necessary to perform emergency rescue procedures involving swift water rivers. Content will cover basic rescue knot practices, handling small rescue boats, emergency care, and controlling special hazards and problems in swift water emergencies.

70g INTRODUCTION TO FIRE BEHAVIOR (WATERSHED) (0.5 unit)

Nine hours lecture/discussion.
Prerequisite: None.
Designed to help students learn basic watershed fire behavior. Content will cover the environmental factors of fire behavior that affect the start and spread of watershed fires, and basic fire suppression methods applicable to breaking the fire triangle. May be taken twice for credit.

70h CREW BOSS TRAINING (1.5 units)

Twenty-seven hours lecture/demonstrations.
Prerequisite: FI TC 76 or an equivalent course.
Content will provide effective training for Crew Bosses and prospective Crew Bosses in performing prescribed duties and responsibilities of a Crew Boss and to provide the guidance necessary to improve their leadership capabilities.

70i HAZARDOUS MATERIAL INCIDENTS (0.5 unit)

Three hours lecture/discussion/demonstrations for 10 weeks.
Prerequisite: FI TC 4 or an equivalent course.
Content will provide students with basic information concerning the properties of hazardous materials and the methods that are most appropriate for handling the various kinds of accidents that can occur with these substances. May be taken twice for credit.
70jkl HEAVY DUTY RESCUE (3 units)

Fifty-four hours lecture/demonstrations and manipulative drills.
Prerequisite: Fl TC 2, EMT 1, or an equivalent course.

Designed to provide students with technical knowledge and practical skills necessary to successfully perform Heavy Duty Rescue emergencies. Content will cover methods and procedures for utilizing heavy duty rescue equipment, developing improvised available rescue equipment, maintaining and storing of heavy duty rescue equipment, and recognizing basic types of building construction and their collapse characteristics resulting from various causes. This course is certified by the Fire Service Training and Educational Program (F.S.T.E.P.). May be repeated for credit.

70m HOME FIRE SAFETY (0.5 unit)

Nine hours lecture/demonstrations.
Prerequisite: None.

Designed to provide basic skills in assessing and correcting fire dangers in the home and/or industry; select and properly use available fire fighting appliances, i.e., fire extinguishers, house lines, etc.; to implement “Operation E.D.I.T.H.” (Exit Drills In The Home); to select, maintain, and test fire detection devices, and to select and perform fundamental rescue procedures.

70n ADVANCED SWIFT WATER RESCUE (1 unit)

Twenty hours lecture and manipulative exercises.
Prerequisite: Fl TC 70f.

Designed to refine students' skills in manipulating and controlling activities at heavy swiftwater rescue scenes. Content includes advanced river crossing techniques, cross river strokes management, swiftwater search techniques, and team organizational requirements. Course may be repeated for credit.

70o WILDERNESS SURVIVAL (1.5 units)

Thirty hours lecture and manipulative exercises.
Prerequisite: None.

Designed to provide students with fundamental knowledge necessary to successfully perform various survival techniques encountered during wilderness emergency situations. Contents will cover first aid treatment procedures which are specified in the American Red Cross Standard First Aid Program. Course will also provide various methods of prevention and evacuation procedures applicable to wilderness survival.

70p INCIDENT COMMAND SYSTEM (1 unit)

Eighteen hours lecture and discussion.
Prerequisite: Fl TC 50 or equivalent.

Designed to thoroughly familiarize the student with the design, components, and organization of the Incident Command System. Content will cover Incident Command System in terms of general familiarization, interactive components, functions, responsibilities, supervision, and motivation techniques.

70q FIRE MANAGEMENT 1A (2 units)

Thirty-six hours lecture/discussion.
Prerequisite: Fl TC 1 or equivalent.

Designed to provide students with fundamental knowledge of planning, operating and controlling the personnel functions necessary to become a company officer. Content will cover areas of training, counseling, managing the development of a firefighter, participating in departmental grievance procedures, managing discipline and morale, managing safety standards, and managing minority group members.

70r FIRE COMMAND 1A (2 units)

Thirty-six hours lecture and simulations.
Prerequisite: Fl TC 1 or equivalent.

Designed to provide those having an interest in Fire Company Officer duties with information and experience in command and control techniques at the scene of an emergency. Emphases are on the acts of commanding, the authority or right to command, the personnel, organization or area under a commander and the performance requirements for Fire Service Officers.

70s FIRE COMMAND 1B (2 units)

Thirty-six hours lecture and simulations.
Prerequisite: Fl TC 70r.

Designed to provide fire company officers with information and experience in command and control techniques used at the scene of hazardous material incidents. Emphases are on the acts of commanding, the authority or right to command, the personnel organization or area under commander and the performance requirements for Fire Service Officers.

70t FIRE PREVENTION OFFICER 1A (2 units)

Thirty-six hours lecture/demonstrations.
Prerequisite: Fl TC 5 or an equivalent course.

Designed to provide students with the fundamental skills and knowledge needed to obtain the professional level of competency required for Fire Prevention Officer I. Course content will cover areas of legal responsibilities and fire hazard characteristics of various materials.

70u FIRE PREVENTION OFFICER 1B (2 units)

Thirty-six hours lecture and demonstration.
Prerequisite: Fl TC 70t.

Designed to provide basic fire prevention information for company officers so they may respond to a variety of fire prevention situations in a professional and effective manner. Meets NFPA 1031 Fire Inspection Professional Qualifications and California State Board of Fire Services Standards for Fire Prevention Officer 1b. A continuation of Fire Prevention Officer 1A.
70v FIRE INVESTIGATION 1 (2 units)

Forty hours lecture and practical exercises.
Prerequisite: Completion of FI TC 50 or equivalent.
Designed for arson investigators to successfully carry out their responsibilities in arson
detection and explosives investigation. Covers essential elements of fire and explo-

70w FIRE SERVICE INSTRUCTOR IA (2 units)

Two hours lecture.
Prerequisite: None.
Designed for fire company officers who conduct in-service training programs. Provides
a variety of methods and techniques to help fire service personnel select, develop, and
organize material for in-service programs. Provides methods of evaluation and an op-
portunity to apply major principles of learning through practice return demonstrations.

70x FIRE SERVICE INSTRUCTOR IB (2 units)

Two hours lecture.
Prerequisite: FI TC 70w.
A continuation of FI TC 70w. Designed to give the student more sophistication in the
development, implementation and evaluation of in-service programs in the fire ser-

71a BASIC VOLUNTEER FIREFIGHTING PROCEDURE I (1 unit)

Eighteen hours lecture and manipulative exercises.
Prerequisite: None.
Designed to provide volunteers with a basic knowledge and skills in firefighting prac-
tices. Content includes the basic usage of forcible entry tools, ventilation tools, rope
usage, extinguisher usage, salvage and overhaul procedures, rescue procedures,
resuscitation procedures and cardio-pulmonary resuscitation procedures used by fire
departments.

71b BASIC VOLUNTEER FIREFIGHTING PROCEDURES II (1 unit)

Eighteen hours of lecture and manipulative exercises.
Prerequisite: FI TC 73a with a “C” or higher.
Designed to provide Volunteer/Call Firefighters with the fundamental knowledge of
firefighting procedures. Content will include areas of: fire behavior and tactics; pump-
ing procedures; hose evolutions; ground ladder procedures.

71c PETROLEUM FIRE PROCEDURES (0.5 unit)

Nine hours lecture and manipulative exercises.
Prerequisite: FI TC 50 or equivalent.
Designed to provide the student with the practical experiences in various firefighting
procedures involving flammable liquid fire emergencies, at/or near petroleum installa-
tions. Content will include utilization of safety practices and various extinguishing
agents required for the extinguishment of different types of petroleum product fires.
This course is certified by the California State Fire Service Training and Educational
Program.

71d SEASONAL FIREFIGHTER BASIC TRAINING (1 unit. Limit 2 units.)

Twenty to forty hours lecture, demonstrations and manipulative exercises.
Prerequisite: FI TC 50 or equivalent.
Designed to develop knowledge and skills of prospective and employed fire engineers
in pump operations. Content includes procedures on pumps, pumping principles,
practical hydraulics, safe apparatus operation enroute and at scenes of emergencies,
principles of reading and interpreting gauges, hydrant operations and drafting pro-
cedures. Content meets the requirements for Driver/Operator Certification (N.F.P.A.
No. 1002).

72 ORIENTATION TO FIRE TECHNOLOGY (1 unit)

Eighteen hours lecture and manipulative exercises.
Prerequisite: None.
Provided to develop knowledge and skills necessary to pursue a career within the Fire
Service and related fields. It will assist students to develop skills needed for success in
oral interviews, civil service written examinations, and preparation of a resume for
employment. Content will include a survey of Fire Technology courses and degree
programs.

73a BASIC VOLUNTEER FIREFIGHTING PROCEDURE I (1 unit)

Eighteen hours lecture and manipulative exercises.
Prerequisite: None.
Designed to provide volunteers with a basic knowledge and skills in firefighting prac-
tices. Content includes the basic usage of forcible entry tools, ventilation tools, rope
usage, extinguisher usage, salvage and overhaul procedures, rescue procedures,
resuscitation procedures and cardio-pulmonary resuscitation procedures used by fire
departments.

73b BASIC VOLUNTEER FIREFIGHTING PROCEDURES II (1 unit)

Eighteen hours of lecture and manipulative exercises.
Prerequisite: FI TC 73a with a “C” or higher.
Designed to provide Volunteer/Call Firefighters with the fundamental knowledge of
firefighting procedures. Content will include areas of: fire behavior and tactics; pump-
ing procedures; hose evolutions; ground ladder procedures.

74a PUMP DRIVER/OPERATOR I (1—2 units)

Twenty to forty hours lecture, demonstrations and manipulative exercises.
Prerequisite: FI TC 70w or equivalent.
Designed to develop knowledge and skills of prospective and employed fire engineers
in pump operations. Content includes procedures on pumps, pumping principles,
practical hydraulics, safe apparatus operation enroute and at scenes of emergencies,
principles of reading and interpreting gauges, hydrant operations and drafting pro-
cedures. Content meets the requirements for Driver/Operator Certification (N.F.P.A.
No. 1002).

75 PETROLEUM FIRE PROCEDURES (0.5 unit)

Nine hours lecture and manipulative exercises.
Prerequisite: FI TC 50 or equivalent.
Designed to provide the student with the practical experiences in various firefighting
procedures involving flammable liquid fire emergencies, at/or near petroleum installa-
tions. Content will include utilization of safety practices and various extinguishing
agents required for the extinguishment of different types of petroleum product fires.
This course is certified by the California State Fire Service Training and Educational
Program.

76 SEASONAL FIREFIGHTER BASIC TRAINING (1 unit. Limit 2 units.)

Twenty hours lecture/demonstrations and manipulative exercises.
Prerequisite: None.
Designed to provide students with fundamental knowledge and skills of fire suppres-
sion procedures used to control wildland fires. Content will include areas of safety
equipment; size-up procedures; line construction principles; use and maintenance of
hand tools; basic woodsmanship skills; basic first aid; air support operations; bulldozer
operations.
80a ARSON AND EXPLOSIVE INVESTIGATION (2 units)
Forty hours lecture and practical exercises.
Prerequisite: Completion of FI TC 50 or equivalent.
Designed for arson investigators to successfully carry out their responsibilities in arson
detection and explosives investigation. Covers essential elements of fire and
explosives behaviors, types and use of laboratory services, and investigative responsi-
bilities of an investigator at scene of arson and explosives incidents. This course
meets P.O.S.T. certification requirements. Not open to students with credit in ADM J
80a.

80b FIRE INVESTIGATION 2 (2 units)
Forty hours lecture and manipulative exercises.
Prerequisite: FI TC 80a or ADM J 80a.
Designed to prepare arson investigators on essential techniques of criminal investiga-
tion. Course will serve as a phase of training for those arson investigators who must
conduct criminal investigations to a conclusion in a court of law. Content ranges from
the criminal law, search and seizure, and includes laboratory services and such ac-
tivities which may be an aid to criminal investigation. Not open to students with credit
in ADM J 80b.

200 FIRE SERVICE HYDRAULICS (2 units)
Thirty-six hours practical exercises. Open entry/open exit.
Prerequisite: FI TC 1 or an equivalent course.
Designed to assist fire fighters, pump operators and engineers in meeting the re-
quirements for Fire Apparatus Driver/Operator certification (NFPA 1002 and SBFS),
and to assist in passing promotional exams. Content covers characteristics of water,
friction loss, engine pressure, multiple lines, unequal layouts, pump and pumpers,
field equations, and elementary mathematics.

SENIOR STUDIES

SENIOR STUDIES
(SEN S)

90 TOPICS IN SENIOR ACTIVITY (0 units)
One to six hours lecture, demonstration or activity.
Prerequisite: None. Recommended for senior citizens and for other adults interested
in senior citizen's programs.
Topics may include travelogue-lectures, literature, arts and crafts, political concerns,
psychology, horticulture and other areas of activity. Regular or emergent curriculum
adapted or designed to meet the needs, interests and capabilities of senior citizens who
seek instruction without college credit, examination or grades.

SOCIAL SCIENCE-
INTERNATIONAL EDUCATION

Economics
History
Political Science
Social Science

This program is designed to award an AA degree in Social Science with an emphasis
in either Economics, History or Political Science. These majors provide training for
those who plan a career in government service, intend to pursue the study of law or
related disciplines, wish to prepare for work in journalism or writing, or wish to prepare
for teaching or to work for advanced degrees.

COURSE DESCRIPTIONS

ECONOMICS
(ECON)

• 1 PRINCIPLES OF ECONOMICS—MICRO (3 units)
Three hours lecture.
Prerequisite: None.
An introduction to the principles of economic analysis and decision making from the
viewpoint of the individual consumer, worker, and firm. Emphasis upon the price
system allocation of resources, distribution of income, supply and demand analysis,
the structure of American industry, and applications to current economic policy and
problems.
2 PRINCIPLES OF ECONOMICS—MACRO (3 units)

Three hours lecture.
Prerequisite: None.
An introduction to the principles of economic analysis and decision making from the viewpoint of the society. Emphasis upon national income analysis, unemployment, inflation, economic growth, fiscal and monetary policies, and applications to current economic policy and problems.

10 INTRODUCTION TO ECONOMICS (3 units)

Three hours lecture.
Prerequisite: None.
One semester course combining topics discussed in ECON 1 and 2, covered in a less technical manner emphasizing current economic problems. Serves as a survey course in economics for non-economics and non-business majors.

HISTORY (HIST)

The major in history is designed for students interested in gaining an understanding of man’s political, economic and social past. The major is an important part of the liberal arts program and can serve as preparation for graduate study in teaching, law, business, government and journalism.

Bakersfield College offers a wide variety of history courses in addition to those listed below and the student should select according to his/her area of specialization as well as the requirements of the college to which he/she plans to transfer. To assist in determining an appropriate minor, foreign language requirements, and the like, it is suggested that the student consult his/her counselor and appropriate four-year college catalogues.

4a—4b EUROPEAN CIVILIZATION (3—3 units)

Three hours lecture.
Prerequisite: None for 4a. Recommended, though not required, that 4a be taken before 4b.
An introductory study of the periods of major historical significance in development of European society and its impact on the rest of the world, including the United States. The main objective is to integrate the political, social, economic, cultural, and ideological developments that have shaped our western heritage. 4a surveys ancient Greece and Rome, the Middle Ages, the Renaissance and Reformation. 4b examines Europe from the Age of Absolutism to the Twentieth Century.

8a—8b HISTORY OF THE AMERICAS (3—3 units)

Three hours lecture.
Prerequisite: None.
The development of the Western Hemisphere from pre-discovery to the present. The first semester is a survey of the Indian cultures, exploration, settlement, colonial development, expansion, rivalry and the movements for independence. The second semester emphasizes the evolution of the American nations and peoples in the nineteenth and twentieth centuries and their inter-American relations. This two-semester course is designed to fulfill core requirements in the U.S. Constitution, American history and institutions and state and local government.

12 THE JUDEO-CHRISTIAN TRADITION (3 units)

Three hours lecture.
Prerequisite: None.
A one semester history of the origins and the subsequent global development of the Judeo-Christian tradition. Focus will be on the institutions, theology and personalities of that tradition down to the present. (Offered only occasionally.)

15a—15b HISTORY OF ENGLAND AND GREATER BRITAIN (3—3 units)

Three hours lecture.
Prerequisite: None.
Covers the full sweep of British history from the Celto-Iberian origins to the present. Besides tracing the major political and economic developments, the course deals with the constitutional evolution of English institutions and the cultural and social foundations of Britain’s contributions in the fields of religion, philosophy, science and literature. 15a covers the Celtic period through 1689. 15b covers the Revolutionary settlement to the present. (Offered only occasionally.)

16 TWENTIETH CENTURY UNITED STATES (3 units)

Three hours lecture.
Prerequisite: None.
History of the United States since its emergence as a world power late in the 19th century. Special emphasis is placed upon the foreign relations, and military history of the United States. (Offered only occasionally.)

17a—17b HISTORY OF THE UNITED STATES (3—3 units)

Three hours lecture.
Prerequisite: Qualifying score on a college aptitude test or “C” or higher in SOC S 53a.
A survey of the political, economic and cultural history of the United States from earliest colonial times to the present. Fulfills core requirements in the U.S. Constitution, American history and institutions and California state and local government. 17a includes a study of the U.S. Constitution and Federal Government. 17b includes a study of California state and local government.
• 18a HISTORY OF EARLY CALIFORNIA (3 units)
Three hours lecture.
Prerequisite: None.
The political, economic, social and cultural development of California from earliest times to 1870. Includes the Spanish, Mexican, and Early American periods. Satisfies the code requirement in U.S. Constitution, American history and institutions. Not open to students with credit in HIST 18.

• 18b MODERN CALIFORNIA (3 units)
Three hours lecture.
Prerequisite: None.
The student will examine the historical environment which has produced modern California, including political, economic, social, and cultural development. Topics will include: influence of the Southern Pacific, Bonanza Farms and water disputes, the Constitution of 1879, the 1905 San Francisco earthquake, the Owens Valley controversy, John Muir and the conversation ethic, "Okses" and "Arkies," the movie and TV industry, and the contribution of ethnic minorities. Fulfills code requirements in California state and local government.

• 19a—19b HISTORY OF ASIAN CIVILIZATIONS (3—3 units)
Three hours lecture.
Prerequisite: None.
A survey of the cultural, religious and political history of the Islamic World, Indian civilization, the cultures of Southeast Asia and the civilizations of China, Korea and Japan. Emphasizes the problems of political and economic development in the 20th Century. (Offered only occasionally.)

• 20a—20b BLACK HISTORY (3—3 units)
Three hours lecture.
Prerequisite: None.

• 30a HISTORY OF MEXICO (3 units)
Three hours lecture.
Prerequisite: None.
A survey of the history of Mexico from Pre-Columbian times to the present. Includes an examination of Mexico's relations with the United States, with an emphasis on the influence of the United States' constitution on Mexico's political history. Fulfills code requirements in U.S. Constitution, American history and institutions. Not open to students with credit in CH ST 30a.

• 30b HISTORY OF CHICANOS (3 units)
Three hours lecture.
Prerequisite: None.
A survey of the history of the Chicanos, with an emphasis on the development of the Southwest. The course reviews Pre-Columbian contributions to civilizations, then examines in depth the conquest of the Aztecs by the Spanish, the settlement and development of the Southwest, the Mexican War of 1846-1848, the effects of the Mexican Revolution, the contributions of Mexicans/Chicanos to history, and issues affecting Chicanos today. Fulfills code requirements in California state and local government. Not open to students with credit in CH ST 30b.

• 31 CIVIL WAR AND RECONSTRUCTION (3 units)
Three hours lecture.
Prerequisite: None.
A study of the social, intellectual, political and economic problems of the U.S. during the ante-bellum, Civil War and Reconstruction periods. (Offered only occasionally.)

• 36 HISTORY OF NATIVE AMERICANS (3 units)
Three hours lecture.
Prerequisite: None.
A study of the American Indian including a survey of origins, customs and religion. The main emphasis will be on encounter with white expansion and United States governmental policies. (Offered only occasionally.)

• 38 RUSSIA SINCE 1800 (3 units)
Three hours lecture/discussion.
Prerequisite: None.
Emphasizes the continuity of Russian institutions and values from Tsarist times through the Revolution and down to the present time. Emphasizes a historical approach, although the last four weeks of the course will be devoted exclusively to the study of the functions and institutions of the contemporary USSR. (Offered one semester, every other year.)

• 39 WORLD WAR II (3 units)
Three hours lecture/discussion.
Prerequisite: None.
The student will examine the historical environment which produced World War II, including international economic and ideological conflicts. Also, the student will study the course of the war, militarily, politically and diplomatically. Examples of topics covered are Pearl Harbor, Rommel the Desert Fox, Stalingrad, Battle of the Bulge, Leyte Gulf. Diplomatic conferences covered are Casa Blanca, Teheran, Yalta, Potsdam. (Offered only occasionally.)
• 40 THE FAR WESTERN FRONTIER (3 units)

Three hours lecture.
Prerequisite: None.
For students of Western Americana. A history of the Transmississippi West from 1700 to 1900. Topically traces the exploration and settlement of the West. Deals with the fur-trapping mountain men, the Western Indians and the Army, the mining, cattle and farming frontiers. (Offered only occasionally.)

• 47 THE OLYMPIC MOVEMENT (2 units)

Three hours lecture.
Prerequisite: None.
Designed to provide a broad-based background in the history, ceremonies, and directions of the Olympic Games, both ancient and modern, and the spirit of Olympism. Examines a variety of topics which will be expanded by student research and class participation. (Not open to students with credit in PH ED 47.)

• 51 HISTORY OF KERN COUNTY (3 units)

Three hours lecture.
Prerequisite: None.
A history of the Kern County area, from the earliest times to the present. Besides a study of the geologic and geographic characteristics of the area, the course includes a study of the economic, cultural and political life of the people who have inhabited the area from aboriginal times.

POLITICAL SCIENCE

(POL S)

• 1 AMERICAN GOVERNMENT (3 units)

Three hours lecture.
Prerequisite: None.
An introduction to American government, with particular emphasis on the national government. A comprehensive analysis of governmental structure, functions, principles and problems. This course in combination with HIST 17b satisfies code requirements in the U.S. Constitution, American history, and institutions, and California state and local government.

• 2 COMPARATIVE GOVERNMENT (3 units)

Three hours lecture.
Prerequisite: None.
An introduction to comparative government, involving the analysis of constitutional principles, governmental institutions and political systems of selected governments abroad. Offered as an elective in the Social Science field.

• 3 INTERNATIONAL POLITICS (3 units)

Three hours lecture.
Prerequisites: HIST 17a—17b or HIST 8a—8b or POL S 1.
Surveys the dynamics and ideologies of present-day international politics and rivalries. Historical depth is attained by surveying the development of the national state system and the evolution of the techniques and arts of diplomacy.

• 4 UNITED STATES FOREIGN POLICY (3 units)

Three hours lecture.
Prerequisite: None. HIST 17a or 17b or POL S 1 is recommended.
An introductory course surveying the ideological, structural and historical underpinnings of United States foreign policy. Special emphasis will be given to current international crises and developments as they affect United States interests at home and abroad.

• 5 CURRENT ISSUES IN AMERICAN GOVERNMENT

(1—3 units per semester. Limit 6 units.)

Thirty hours of campaign participation for one unit; two hours per week lecture/discussion for two units; two hours per week lecture/discussion plus thirty hours of campaign participation for three units.
Prerequisite: None.
A study of current political issues of major significance, such as Presidential elections, impeachment or Constitutional revision. Offered only when an issue of exceptional importance appears on the American scene. May be taken four times only.
• 26 CHICANO ORGANIZATIONS AND PUBLIC INSTITUTIONS (3 units)

Three hours lecture and discussion.
Prerequisite: None.
Provides an understanding of the interaction between public institutions and the Chicano community. Introduces basic concepts, principles, and perspectives related to a variety of community affairs affecting the Chicano. The community affairs analyzed include employment, education, law, and local government. The allocation of public resources and services in relation to proposed community needs will be reviewed in terms of the types of the social policy reflecting the dominant and/or Chicano Cultural values. Not open to students with credit in CH ST 26.

• 42 PRINCIPLES OF LEADERSHIP (2 units)

Two hours lecture.
Prerequisite: None.
Designed to train students to assume student body leadership and responsibility in school affairs. Specific instruction is given in the principles and administration of parliamentary law; the co-curricular activity program; finances, including budgetary procedures; and group dynamics. One hour each week is devoted to a student body business meeting and one hour to instruction. Student officers serving their first term are required by Associated Student Body by-laws to take the course.

• 45 CALIFORNIA LOCAL GOVERNMENT (3 units)

Three hours lecture.
Prerequisite: None.
A survey of county, city and special district organization and operations, including a description of administration, identification of sources of fiscal support, inventory of services and procedures for regulation and modification.

SOCIAL SCIENCE
(SOC S)

• 1 SCIENCE, TECHNOLOGY AND HUMAN VALUES — MEN AND MACHINES: FROM KNOW HOW TO NOWHERE (3 units)

Three hours lecture/discussion.
Prerequisite: None.
The student will be able to appreciate and understand the complimentary nature of scientific investigation and humanistic values. Emphasizes the social, ethical, political and economic implications of science and technology. (Offered only occasionally.)

51 AMERICAN POLITICAL AND ECONOMIC ISSUES (3 units)

Three hours lecture.
Prerequisite: None.
A general introduction to American political issues for the non-transfer student. The structure of American and California governments and constitutions is analyzed as well as the style of American politics. Social and economic factors that provide the infrastructure of our political institutions are examined. Satisfies part of the general education requirement in Social Science for graduation. Replaces Social Science

• 49 SPECIAL STUDIES: HONORS (1 unit)

Prerequisite: Nomination by faculty members.
Seminars and/or individual conferences by arrangement. Independent, individual study planned to provide an enriched academic experience for students not being served in regularly scheduled courses. It is planned to meet the needs of superior students whose background and interests indicate that they could profit from individual study in a subject area. The course will be designated according to the subject field studied, i.e., Special Studies - German.

201 SPECIAL PROJECTS AND STUDIES
(1 unit. Limit 6 units.)

A minimum of eighteen hours per unit.
Prerequisite: Recommendation by department chair.
Special projects of studies in an area not being served by regularly scheduled courses. The student is required to meet periodically with faculty advisor and/or department chair to review progress in the study program.

TEACHER AIDE
See Family and Consumer Education

THEATRE ARTS

Many people who major in the various specialities of the dramatic arts go into teaching or into community theatre activities. Many have used training in theatre arts toward attaining confidence and self-assurance in professions such as law, the ministry or business.

ASSOCIATE OF ARTS DEGREE PROGRAM

Students must comply with the requirements as shown in the catalog under Graduation Requirements. Counselors/advisors will assist the student in planning for an associate degree.
**Minimum units required in discipline — 23**

**Required Courses**

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>THEAT 2a Elements of Acting</td>
<td>3.0</td>
<td>THEAT 4ab Intro to Stagecraft</td>
<td>3.0</td>
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<tr>
<td>THEAT 2b Elements of Acting</td>
<td>3.0</td>
<td>THEAT 6ab Intro to Make-up</td>
<td>3.0</td>
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<tr>
<td>THEAT 3a Appl Acting Probs</td>
<td>2.0</td>
<td>THEAT 7ab Intro to Stage Costume</td>
<td>3.0</td>
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<tr>
<td>THEAT 3b Appl Acting Probs</td>
<td>2.0</td>
<td>THEAT 27 Theatre Laboratory</td>
<td>4.0</td>
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**Electives**

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<th>Course</th>
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<tbody>
<tr>
<td>THEAT 5ab Intro Scene Designs</td>
<td>3.0</td>
<td>THEAT 24 Mus Comedy Prctictum</td>
<td>1.5</td>
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<tr>
<td>THEAT 8 Musical Theatre</td>
<td>3.0</td>
<td>THEAT 31 Intro Film Studios</td>
<td>3.0</td>
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<tr>
<td>THEAT 12 Creative Dramatics</td>
<td>1.0</td>
<td>THEAT 32 Contem Film Studies</td>
<td>3.0</td>
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<tr>
<td>THEAT 23ab Musical Theatre</td>
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**COURSE DESCRIPTIONS**

**THEATRE ARTS**

**THEAT 1a-1b-1c INTRODUCTION TO ACTING (1-1-1 unit)**
Three hours lecture per week for six weeks.
Prerequisite: A qualifying score on the Davis Reading Test. Designed for non-majors. Emphasizes mastery of self as the key to creative process of communication and performance through improvisation, theatre games, concentration, pantomime, etc. Recommended for those interested in performing arts or in personal development.

**THEAT 2a ELEMENTS OF ACTING (3 units)**
Three hours lecture.
Prerequisites: THEAT 1a, b, c, or audition; concurrent enrollment in 3a. Qualifying score on the Davis Reading Test. Provides understanding of self as creator and medium of acting. Develops fundamental knowledge of such elements of acting as pantomime, vocalization, improvisation, relaxation—concentration, sense memory, etc.

**THEAT 2b ELEMENTS OF ACTING (3 units)**
Three hours lecture.
Prerequisites: THEAT 2a or audition; concurrent enrollment in 3b. The theory and practice of acting, in depth. Enlarges upon techniques learned in 2a, and introduces methods of script analysis, character development, schools of acting, and styles of performance.

**THEAT 3a-3b-3c-3d APPLIED ACTING PROBLEMS (2-2-2-2 units)**
One hour lecture and three hours laboratory.
Prerequisites: For 3a, concurrent enrollment in 2a; for 3b, concurrent enrollment in 2b, 3b is prerequisite to 3c and 3c to 3d.
A study and application of the various theories of acting. The content of this course is an experience of the subject matter being studied in 2a, 2b, or of more advanced problems posed by the second year student actor.

**THEAT 4a INTRODUCTION TO STAGECRAFT (1.5 units)**
Three hours lecture per week for nine weeks.
Prerequisite: None.
A basic introduction to technical theatre. Designed for the student who wants a general knowledge of stagecraft but is not a technical theatre major. Covers basic set construction, scenic paint, scene painting, and stage properties.

**THEAT 4b INTRODUCTION TO STAGECRAFT (1.5 units)**
Three hours lecture per week for nine weeks.
Prerequisite: Completion of THEAT 4a.
A specialized course in technical theatre that will concentrate on the areas of 3-D scenery, special effects, lighting, and sound. This course is designed for the technical theatre major or for the student interested in learning more about stagecraft after he/she has completed THEAT 4a.

**THEAT 5a INTRODUCTION TO SCENE DESIGN (1.5 units)**
Three hours lecture per week for nine weeks.
Prerequisite: None.
A basic introduction to scene design. Designed for the student who wants a general knowledge of set design. The course will cover the functions and types of scene design, drafting and painting equipment, elements of design, drafting a floor plan, and constructing a model of a unit designed by the student.

**THEAT 5b INTRODUCTION TO SCENE DESIGN (1.5 units)**
Three hours lecture per week for nine weeks.
Prerequisite: Completion of THEAT 5a.
An advanced course in scene design that will concentrate on drafting, painting techniques, perspective drawing and model making. Designed for the technical theatre major or for the student interested in learning more about scene design after he/she has completed THEAT 5a.

**THEAT 6a INTRODUCTION TO STAGE MAKE-UP (1.5 units)**
Three hours lecture per week for nine weeks.
Prerequisite: None.
A basic introduction to stage make-up. Designed for the student who wants a general knowledge of make-up. The course will cover character analysis, facial anatomy, and old age make-up.
• 6b INTRODUCTION TO STAGE MAKE-UP (1.5 units)

Three hours lecture per week for nine weeks.
Prerequisite: THEAT 6a.
An advanced course in stage make-up that will concentrate on the area of 3-Dimensional Make-up, rubber prosthesis, beards and mustaches, and non-realistic make-up. Designed for the technical theatre major or for the student interested in learning more about the field of stage make-up after he/she has completed THEAT 6a.

• 7a INTRODUCTION TO STAGE COSTUME (1.5 units)

Three hours lecture per week for nine weeks.
Prerequisite: None.
A basic introduction to stage costume. Designed for the student who wants a general knowledge of costume. The course will include basic sewing techniques, pattern information, types of fabric, Gothic and Renaissance costume history and how to make a costume plot.

• 7b INTRODUCTION TO STAGE COSTUME (1.5 units)

Three hours lecture per week for nine weeks.
Prerequisite: Completion of THEAT 7a.
An advanced course in stage costume that will concentrate on the areas of pattern drafting, basic costume history, and design. The course will also provide a practical approach to costume through the construction of costume pieces—costume renderings and participation on a wardrobe crew. Designed for the technical theatre major or for the student interested in learning more about stage costume after he/she has completed THEAT 7a.

• 8 MUSICAL THEATRE (3 units)

Three hours lecture.
Prerequisite: None.
A study of musical theatre. Lecture and discussion of music, dramatic styles and structure of selected musical comedies. Emphasis on problems of actual performance, culminating in a project or concert style performance by members of the class.

• 12 CREATIVE DRAMATICS (1 unit)

Three hours lecture/laboratory.
Sixteen to eighteen hours lecture per unit. (Limit of 3 units.)
Prerequisite: None.
An investigation into the literature and techniques of creative drama and allied crafts as tools for communication and problem solving. The course will include, in varying emphasis, theatre games, pantomime, improvisation, storytelling, role-playing, puppetry, creative crafts, and methods and concepts of creative dramatics as appropriate to the students in each section.

• 21 THEATRE ORIENTATION: PROBLEMS IN PRODUCTION (1 unit)

One hour lecture per week for eighteen weeks. (Limit 4 units.)
Prerequisite: None.
A course designed to acquaint the student with all the aspects of a theatre production. Includes the principles and purposes of theatre as an art, the contributions of all artists and craftsmen toward creating this performed art in today's theatre.

• 23ab MUSICAL THEATRE (2 units)

23a—23b (1—1 unit) equivalent to 23ab.
Two hours lecture. Nine weeks per unit.
Prerequisite: None.
A study of musical comedy and musical theatre representative of the 20th Century. Lecture and discussion of musical and dramatic styles and structure of selected musical shows. Additional emphasis on staging and problems of actual performance. Culminates in a project or concert style performance by members of the class.

• 24 MUSICAL COMEDY PRACTICUM (1.5 units)

Three hours lecture and studio.
Prerequisite: None.
The student will gain a foundation in the performance of music from musical theatre. He/she will develop technique and discipline necessary to singing comedy.

• 27 THEATRE LABORATORY (1—3 units)

Sixty to one hundred eighty hours. (May be repeated four times with a limit of 8 units of credit.)
Prerequisite: None.
The rehearsal and production of both main stage and experimental theatre dramas. Theatre activity for the beginner or expert in acting, set construction, costuming, make-up, publicity, lights, sound, and theatre management.

• 30 FILM FOCUS (1 unit)

Sixteen to eighteen hours per unit. (Limit of 4 units.)
Prerequisite: None.
Designed to focus the awareness and appreciation of the student upon a single type of film, i.e. work of a particular actor, director, theme, etc. Course will concentrate upon an in-depth examination of a very limited area of the art of film.

• 31 INTRODUCTION TO FILM STUDIES (3 units)

Three hours lecture per week.
Prerequisite: A qualifying score on the Davis Reading Test.
Designed to heighten the awareness and appreciation of the student to an audience's relationship and responsibility to the cinema from its beginning to the present. The critical viewing and discussion of film will provide the basis for the development of aesthetic appreciation.
• 32 CONTEMPORARY FILM STUDIES (3 units. Limit 6 units.)

Three hours per week.
Prerequisite: A qualifying score on the Davis Reading Test.
Designed to acquaint the student with the audience's relationship and responsibility to cinema. By viewing and discussing the films of a particular genre, such as the Western or the Foreign film, and then reading and writing about them, the student will develop an aesthetic appreciation of movies and related art forms.

VOCA TIONAL NURSING
See Health Careers

WATER TECHNOLOGY
See Physical Science

WELDING - WOOD
See Industrial Education

WOMEN'S STUDIES

1 THE CONTEMPORARY WOMAN (1–3 units)

Three hours lecture. Eighteen hours attendance per unit.
Prerequisite: None.
Explores the problems of the Contemporary Woman. Students can acquire a better understanding of changing roles, laws, job opportunities and how to re-enter the labor market. Students will also have the opportunity to explore the problems of being single, divorced or widowed and examine the physical and emotional needs of women. Resource people from the community will be utilized.

5sdw SELF DEFENSE FOR WOMEN (0.5–1 unit)

One to two hours per week for eighteen weeks.
Prerequisite: None.
Simple techniques to prepare women to meet an emergency without panic, to minimize the possibility of danger and to give poise and confidence when confronted with danger. Identical to PH ED 5sdw.

14 NUTRITION AND FITNESS (3 units)

Two hours lecture and two hours laboratory.
Prerequisite: None.
The student will be able to successfully lose weight using the proper techniques of nutrition and exercise. The proper way of eating, planning, and preparing meals for weight control will be covered in order for students to lose and maintain weight. Individual exercise programs will be developed for every student. (Not open to students with credit in NUTR 14.)

15 Career Shadowing 1/2 unit 1 hour (semester)
Identical to Course 15

24 CONTEMPORARY ISSUES AND THE CHICANA (2 units)

Three hours lecture/discussion for twelve weeks.
Prerequisite: None.
A survey of the changing psychological and social conditions of la Chicana as they pertain to the economic, political, and family developments within the Chicano cultural context. An analysis of specific issues such as housing, health, and employment will be made in their specific relationships with Chicanas in relation to the broad areas of the economy, the family and politics. (Identical to CH ST 24.)

30 Interpersonal Skills (3 units)
See Physical Science

35 RELATIONSHIPS IN THE 1980's (3 units)

Three hours lecture.
Prerequisite: None.
Student will explore a variety of relationship choices and realities including the fact that at some point all relationships end. Reading, exercises, speakers, discussion, journal writing, communication and other skills will be utilized so as to learn what external influences have shaped the options now available as well as what internal influences affect how those options are perceived and chosen.

36a–36b WOMEN ARTISTS (3 units)

36a–36b (1.5–1.5 units) equivalent to 36ab.
Three hours lecture.
Prerequisite: None.
The student will gain an understanding of art history and art appreciation through the study of women artists, as related to the psychology, philosophy, and politics of the times. The student will gain an understanding of the contemporary women artists through a biographical approach. (Not open to students with credit in ART 36ab.)

37 PSYCHOLOGY OF WOMEN (3 units)

Three hours lecture/discussion.
Prerequisite: None; PSYCH 51 or 1a recommended.
The student will know and understand the basic concepts of women in history and mythology, theories of female development, states of female adjustment, female abilities, achievement, and motivation, biological influences on female behavior, female sexuality, minority group females, and cross-cultural perspectives on the female role. Included will be emphasis on application of the aforementioned theoretical knowledge to the life of the student.

50 Choices and Changes (course 50) 3 units/3 hrs, 18 wk

74 TOPICS IN WOMEN'S STUDIES (0.5–1 unit. Limit 8 units.)

Eight hours minimum per 0.5 unit.
Prerequisite: None.
Selected topics in women's studies related to current interests, recent developments within the field, historical and current concepts of the status, achievement concerns, and role of women as individuals, as members of society, and in relationship to men.
78 AGILITY AND FITNESS PREPARATION FOR WOMEN IN SAFETY EMPLOYMENT (1.5 units)

Three hours per week.
Prerequisite: None.
Designed to develop agility, strength and stamina of students preparing for employment in safety occupations. (Identical to PH ED 78.)

WORK EXPERIENCE
Cooperative Work Experience Education

Cooperative Work Experience offers students an opportunity to combine a planned college study program with on the job experience, organized and coordinated by the college to provide an applied practical learning experience in business, industry, or government agency. Students must carry a minimum of 7—12 units, attend one hour seminar per week, and work 5 to 40 hours per week in a college approved job station. Students will be enrolled in Cooperative Work Experience Education only with permission of Director or designated representative.

COURSE DESCRIPTIONS

WORK EXPERIENCE
(W EXP)

50 COOPERATIVE WORK EXPERIENCE EDUCATION
(1—4 units per semester. Limit 16 units.)

One hour per week seminar and five to twenty (or more) hours per week in college approved job station. A minimum of seventy-five hours on a paid job station, or sixty hours on a non-paid job station is required each semester to earn one unit of credit.
Prerequisite: Meet program qualifications, (7 unit minimum including work experience units) declared vocational/occupational major in area of Work Experience units. Student's declared major course of study must relate to the supervised job station.
The one-hour seminar offers special related instruction in educational-career guidance, human relations, success factors on the job, attitudes, motivation and initiative, grooming, consumer economics, human behavior, men/women and the organization, current factors related to on the job experiences, decision making, achieving career goals. May be taken a maximum of two times or the equivalent of two semesters.
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Archible Sherman
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Phyllis Hullette
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AND
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DUNSTAN, Earl — Business
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HULSEBUS, Lowell B. — Physical Science
INGLES, Goldie — Library
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JOHNSON, Donald E. — Physical Science
JOHNSON, Marguerite — English
JOHNSON, W. F. — Mathematics
JONES, Wylie L. — Business
KEOUGH, Edna — English
KILBURN, H. Parley — Administration

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LANDON, Norma K. — Health Careers
LAUTENSCHLAGER, H. Kenneth — Physical Science
LAWRENCE, George E. — Life Science
LEFEVRE, Eva — Foreign Language
LEVISON, Margaret H. — Administration
LOKEN, Herbert L. — Physical Education, Athletics
LONGACRE, Arvilla — Health Careers
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MC MASTERS, Ronald — Administration
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NUNES, Alice — Physical Education
ODDEN, L. Fum — Business
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RIPPEY, Clayton — Art
ROWE, Jack — Mathematics
SALAVERRIA, Helena — Foreign Language
SAND, Pauline — English
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SELBY-DABB, Phyllis — Communications
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TURNER, James B. — Physical Education
VERHINE, Clyde E. — Social Science
WALKER, William W. — Communications
WALT, Robb — Industrial Education
WATTRON, Frank — Administration
WEBSTER, Persis — Foreign Language
WESSMAN, Rodney G. — Business
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WHETSLE, Dell V. — Administration
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OSTERKAMP, Dale M. — Professor
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M.F.A., University of Utah

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M.S., California State University, Fresno

WOOD, Charles H.—Professor. Director of Band, Instrumental Music
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Ph.D., University of California, Los Angeles

WORTHINGTON, Marilyn—Associate Professor. Family and Consumer Education
B.S., College of Saint Scholastica

WRIGHT, Richard L.—President
B.A., M.A., Kent State University;
Ph.D., University of Northern Colorado

WULF, Evelyn M.—Associate Professor. Librarian
B.A., M.A., University of Denver

YALE, Thomas H.—Professor. Life Science
B.A., M.A., California State University, San Jose
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<td>Wrestling B.C. &amp; San Diego CC @ Palomar</td>
<td>Volleyball Long Beach @ B.C.</td>
<td>Cross Country B.C., L.A. Harbor @ Pasadena</td>
<td>Wrestling Cerritos &amp; C.O.S. @ B.C. Football Long Beach @ B.C. Chamber Orchestra</td>
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</table>

**Activities Board Meeting**
Every Monday, 11:30 a.m., Exec. Bd. Room

**Board of Representatives Meeting**
Every Tuesday, 12:30 p.m., Exec. Bd. Room

**Student Court**
Every Thursday, 11:30 a.m., Exec. Bd. Room
<table>
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<td>L.A. Valley @ B.C.</td>
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- **Wrestling So. Cal Regional @ B.C.**
- **Men's Basketball Merced Tournament**
- **Men's Basketball B.C. @ Taft**
- **Men's Basketball West Hills @ B.C.**
- **Women's Basketball Reedley Tournament**
- **Women's Basketball B.C. @ Sequoias**
- **Wrestling Reedley Tournament**
- **Wrestling State Championships**
- **Men's Basketball B.C. @ Hancock**
- **Women's Basketball Reedley Tournament**
- **END OF FALL SEMESTER**
- **FINAL EXAMS, FALL**
- **12-24 thru 1/15 San Diego Mesa Tourney**
- **WINTER RECESS**

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