Dedicated to the faculty who have and continue to contribute to the college's tradition of teaching excellence.

Photographs in this volume reflect different moments in the 75 year history of Bakersfield College.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus Map</td>
<td>4</td>
</tr>
<tr>
<td>Calendar</td>
<td>6</td>
</tr>
<tr>
<td>The College</td>
<td>12</td>
</tr>
<tr>
<td>Admission — Registration</td>
<td>20</td>
</tr>
<tr>
<td>Academic Regulations</td>
<td>28</td>
</tr>
<tr>
<td>Student Services</td>
<td>38</td>
</tr>
<tr>
<td>Graduation</td>
<td>48</td>
</tr>
<tr>
<td>Certificate and Degree Programs</td>
<td>58</td>
</tr>
<tr>
<td>Programs of Study and Course Descriptions</td>
<td>63</td>
</tr>
<tr>
<td>Administration – Faculty</td>
<td>396</td>
</tr>
<tr>
<td>Index</td>
<td>417</td>
</tr>
<tr>
<td>Trustee Name</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td></td>
</tr>
<tr>
<td>Cecil J. Bailey</td>
<td></td>
</tr>
<tr>
<td>Rose Marie Bans</td>
<td></td>
</tr>
<tr>
<td>M. Glenn Bultman</td>
<td></td>
</tr>
<tr>
<td>E.B. Cornell</td>
<td></td>
</tr>
<tr>
<td>Angus Marchbanks</td>
<td></td>
</tr>
<tr>
<td>Gilbert Plain</td>
<td></td>
</tr>
<tr>
<td>Mark G. Raney</td>
<td></td>
</tr>
<tr>
<td>James Young</td>
<td></td>
</tr>
<tr>
<td>Chancellor</td>
<td></td>
</tr>
</tbody>
</table>
Bakersfield College is entering its 75th year of offering a wide variety of programs and services designed to meet the academic and occupational preparation needs of its student body. This catalog attempts to present, in a useful way, a reference guide to College programs, services and facilities. Enclosed are descriptions for all educational courses and programs, procedures for admission and registration, an outline of student services available, a faculty listing, and a campus telephone directory. Students should take a few minutes to become better acquainted with Bakersfield College through the pages in this publication.

Welcome to Bakersfield College.

Richard L. Wright
President
BAKERSFIELD COLLEGE
CALENDAR
FALL SEMESTER
August 22, 1988 - December 23, 1988

June 6 ............................................. Open Registration Begins
August 18 ........................................ Registration Ends
August 22 ........................................ Instruction Begins
September 5 ..................................... Labor Day Holiday
September 16 .................................. Last Day to Withdraw From a Semester Length
Class Without Receiving a “W”
October 21 ...................................... Last Day to File for Graduation
November 11 ................................... Veterans Day Holiday
November 23 .................................. Last Day to Withdraw From a Semester Length Class
November 24-25 ............................... Thanksgiving Holidays
December 16-23 ............................... Final Examinations
December 23 .................................. End of Fall Semester

SPRING SEMESTER
January 17, 1989 - May 31, 1989

November 28 ..................................... Open Registration Begins
January 12 ....................................... Registration Ends
January 16 ...................................... Martin Luther King, Jr. Day Holiday
January 17 ....................................... Instruction Begins
February 9 ...................................... Last Day to Withdraw From a Semester Length
Class Without Receiving a “W”
February 10 ...................................... Lincoln Day Holiday
February 20 ...................................... Washington Day Holiday
March 17 ......................................... Last Day to File for Graduation
March 20-24 ..................................... Spring Recess
April 28 ............................................. Last Day to Withdraw From a Semester Length Class
May 23-31 ......................................... Final Examinations
May 29 ............................................. Memorial Day Holiday
May 31 ............................................ End of Spring Semester
June 1 ............................................ Commencement

SUMMER SESSION

June 5 ............................................. Open Registration Begins
June 15 ............................................ Registration Ends
June 19 ............................................ Instruction Begins
June 29 ............................................ Last Day to Withdraw From a Summer
Session Length Class Without Receiving a “W”
July 4 .............................................. Fourth of July Holiday
July 19 ............................................ Last Day to Withdraw From a Summer
Session Length Class
July 24-28 ....................................... Final Examinations
July 28 ............................................ End of Summer Session
AFFIRMATIVE ACTION/EQUAL OPPORTUNITY STATEMENT

Bakersfield College is fully committed to providing equal opportunity in its instructional programs, employment and service areas regardless of age, race, color, sex, national origin, religion, or handicap in accordance with the requirements of Title IV and Title VII of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; and section 503 and 504 of the Rehabilitation Act of 1973, as amended. This legislation specifically prohibits discriminatory acts in each of the above categories. Students having concerns regarding any discriminatory activity may contact the following office:

Dr. Charles Carlson
Dean of Instruction
McCuen Hall 15
(805) 395-4534

All persons have the right to seek admission to and complete an educational program at Bakersfield College. Interference with students' access and successful completion of their education by any person through unlawful discriminatory conduct will not be tolerated. The college will initiate disciplinary action against persons found to have interfered with a student's education through any means of illegal or immoral intimidation.

The Bakersfield College Reneguide sets forth a statement of Students Rights and Responsibilities, including college grievance procedures. Students should also refer to this publication for further information.

Additional inquiries pertaining to federal, state, and local affirmative action and equal opportunity laws, and the governing board policies of Bakersfield College or Kern Community College District, may be directed to the following office:

Mr. John Madden
Assistant Chancellor for Personnel
Kern Community College District
2100 Chester Avenue
Bakersfield, CA 93301
(805) 395-4106

ACCIÓN AFIRMATIVA

De acuerdo con la legislación de los derechos civiles, el Bakersfield College provee servicios y beneficios a sus estudiantes sin hacer caso a la raza, al color, al origen nacional, al sexo, a la edad y a cualquier impedimento. (Títulos VI y VII del Acto de Derechos Civiles de 1964; Título IX de los Enmiendas de Educación de 1972; las Secciones 503 y 504 del Acto de Rehabilitación del 1973.)

Para preguntas adicionales acerca de estas leyes y disposiciones, contácte Ud:

Dr. Charles Carlson
Decano de Instrucción
Oficina de Instrucción
McCuen Hall 15
(805) 395-4534
## Administration

President ................................................. 395-4211  
Dean of Instruction ........................................ 395-4534  
Dean of Students ........................................... 395-4204

## Admissions-Records

Admissions-Registration .................................... 395-4301  
Transcripts .................................................. 395-4301  
Registrar .................................................... 395-4301

## Financial Aids

Financial Aids ................................................. 395-4427  
EOPS ............................................................. 395-4351

## Campus Police

Security .......................................................... 395-4554

## Student Services

Assessment Center ............................................ 395-4479  
Athletic Director .............................................. 395-4266  
Bookstore ...................................................... 395-4506  
Career Center .................................................. 395-4457  
Chicano Cultural Center .................................... 395-4532  
Counseling ...................................................... 395-4421  
Dean-Student Services ..................................... 395-4204  
Delano Center .................................................. 725-8020  
Health Services ............................................... 395-4336  
Honors Program ............................................... 395-4427  
International Student Center ............................ 395-4419  
Learning Skills Center ................................... 395-4433  
Lost & Found ................................................... 395-4355  
Library ......................................................... 395-4461  
Martin Luther King, Jr. Center .......................... 395-4570  
Placement-Employment ..................................... 395-4559  
Re-Entry Center ............................................... 395-4582  
Scholarships ................................................... 395-4427  
Student Activities .......................................... 395-4355  
Student Housing .............................................. 395-4355  
Test Bank Service Center .................................. 395-4085  
Transfer Center ............................................... 395-4288  
Tutorial Center ............................................... 395-4430  
Veterans Affairs ............................................ 395-4414
GENERAL INFORMATION

Community Services
Use of College Facilities ........................................ 395-4221
Community Services Classes and Tours ......................... 395-4537
Real Estate/Continuing Education ............................... 395-4143
Ticket Office .................................................... 395-4326

Academic Offices
Agriculture ....................................................... 395-4527
Art ....................................................................... 395-4404
Behavioral Science ................................................ 395-4511
Business Education ............................................... 395-4272
Chicano Studies .................................................. 395-4537
Communications ................................................... 395-4404
Computer Studies .................................................. 395-4275
English .................................................................. 395-4585
Family & Consumer Education ................................. 395-4561
General Studies .................................................... 395-4582
Health & P.E. ....................................................... 395-4266
Health Careers ..................................................... 395-4281
Industrial Education .............................................. 395-4571
Life Science .......................................................... 395-4401
Mathematics .......................................................... 395-4231
Music .................................................................... 395-4404
Philosophy ............................................................. 395-4585
Physical Science .................................................... 395-4224
Public Service ........................................................ 395-4481
Social Science/International Education ..................... 395-4584
Theatre Arts ........................................................... 395-4548
Weill Institute ........................................................ 395-4140
Individualized Business Education Center .................. 395-4160

EXPLANATION OF COLLEGE TERMS

For those who have never attended college before, the following brief explanation of common terms used at Bakersfield College is provided.

A.A., Associate in Arts: General degree granted by California Community Colleges. See college catalog for requirements.

A.S., Associate in Science: General degree granted by California Community Colleges requiring significant work within a specific major. See college catalog for requirements.

Bachelor's Degree: Degree granted by four-year colleges. Usually the Bachelor of Arts (B.A.) or the Bachelor of Science (B.S.).

Class Schedule: The listing of courses including hours, instructor, and room assignments to be offered each semester.
Community Service Classes: Fully fee-funded avocational and recreational classes. These classes carry no credit value.

Credit Course: Courses for which units are granted. See Course Descriptions in college catalog.

Credit-No Credit Grading: A grading system allowing a course to be taken for a grade of Credit or No Credit rather than for a letter grade of A, B, C, D, F. See Academic Regulations in college catalog for details.

Electives: Courses elected by the student which do not fulfill any specific requirement but provide units toward the degree.

General Education: Certain groups of courses required of all degree candidates regardless of their major. These may differ for the A.A. and A.S. degrees and for transfer. See college catalog for specific requirements.

Grade Point Average (G.P.A.): The average of a student's grades. See college catalog.

Lower Division: The first two years of college work, i.e., freshman and sophomore years and/or courses. By law only lower division work can be offered at Bakersfield College.

Major: The major field of study a student plans to pursue, i.e., biology, nursing, etc.

Minor: The field of study a student plans to pursue in addition to the major but with less emphasis. A minor is not usually required.

Non-Credit (ungraded) Course: Course for which no units are given. Restricted generally to Senior Adult and Parent Education programs.

Prerequisite: A requirement which must be completed prior to enrollment in a course. If required, it is listed in the course description. See college catalog.

Semester Unit: In general, a semester unit represents one hour of lecture or three hours of laboratory per week for a semester. Graduation requires 60 semester units. One semester unit is equivalent to one-and-a-half quarter units.

Transcript (of Record): Copy of student's college record prepared by the Records Office.

Upper Division: The last two years of college work, i.e., junior and senior years and/or courses. Upper division work is not offered nor generally accepted in transfer at Bakersfield College.
Established in 1913, Bakersfield College is one of the oldest two-year community colleges in the nation. The initial program offered a one-year curriculum, and in 1915 the trustees of the Kern County High School and Junior College District authorized a second year of junior college and normal school courses. The college opened its present 153 acre campus on Panorama Drive in 1956. Bakersfield College has continued to grow and to meet the educational needs of Kern County, an area 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 (Boron 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.

MISSION STATEMENT

Bakersfield College, widely known for its excellent instruction and superior curriculum, is an open-door institution dedicated to meeting the educational needs of this community with high standards and flexibility toward program development. In keeping with the California Master Plan for Higher Education, Bakersfield College serves state-wide mandates while meeting local needs. These local needs create an important role for the college in its community. First, the city and its environs are geographically isolated making commuting to comparable institutions impractical. Second, Bakersfield College is one of only two institutions in the area offering higher and post-secondary education. Finally, the community Bakersfield College serves is one of the most rapidly expanding in California; local businesses are becoming more technologically advanced, requiring highly trained personnel.

The mission of Bakersfield College is to serve this community by providing the following:

1. A strong and diverse transfer program providing an important transition between local high schools and upper division work at four-year colleges and universities.
2. A highly developed vocational and technical curriculum serving business and industry by providing well-trained personnel in a rapidly expanding community with minimal alternative training opportunities.

3. A General Education program designed to provide the essential base for degree programs; to broaden knowledge, skills and attitudes; to develop analytical ability and critical thinking; and to foster interest in life-long learning in the educational, scientific and cultural fields essential for effective participation in a complex society.

4. A significant remedial and developmental program to serve the needs of a diverse student population and enhance their ability to make useful contributions to society.

5. A broad and flexible continuing education program to assist adults to re-train, maintain competencies, develop themselves as individuals and adapt to an increasingly complex society.

6. A community services program supporting the personal developmental, recreational, and cultural interests and needs of the community.

7. A wide range of student services to assess, guide and support students

Fundamental to these statements is the belief that education should be self-directed, lifetime learning that benefits both the individual and society.

It is essential that first priority be given to transfer, associate-level and certificate programs in liberal arts, science, and vocational-technical education. The curriculum necessarily must include a strong and supportive General Education program as well as developmental education so that students can advance to college-level work within a reasonable time.

Second priority, shall be given to adult continuing education necessary to the social, cultural, and economic well-being of the community.

Third priority shall be given to clearly remedial and basic skills adult education beyond that noted above, and fourth priority to programs/classes which are avocational or recreational in nature.

Student services and learning resources must be provided which are sufficient to serve the needs of the students in achieving their goals in accordance with the priorities indicated above. A strong and broad assessment and guidance program is essential and integral to the priorities indicated.

Community Services remain a priority within the means provided by state funds and community support. Community Service offerings may include many avocational and recreational activities as well as community and cultural events and civic center functions.
14 BAKERSFIELD COLLEGE

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 19 community college districts in 13 states. The districts include 53 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 Faculty Services.

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 the Office of Instruction, 1801 Panorama Drive, Bakersfield, CA 93305, or phone 395-4534.
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.

LIBRARY

Located in the center of campus, the Grace Van Dyke Bird Library has over 60,000 books and bound periodicals and 250 subscriptions to magazines and newspapers. Two large reading rooms and conference/seminar rooms provide a pleasing atmosphere for quiet individual, as well as group study. The library offers classes in library research. InfoTrac, a magazine indexing service, provides quick access to current periodical articles. Electric typewriters are available for public use.

LEARNING CENTER

The Learning Center, in the west wing of the library, is comprised of well-trained instructors and tutors and various learning devices. This well-equipped, professionally-staffed center offers tutorial services, reading and writing classes, learning and study skills courses, open-entry math classes, and individual testing/evaluation services for students with learning disabilities. For students who wish to improve their memory, note-taking, or test-taking skills on a short-term basis, the Learning Center has short-term classes for them.

Individuals who want to study mathematics may also enroll in an open-entry/open-exit math class on the Learning Center Mezzanine. The math center offers courses in arithmetic, pre-algebra, elementary algebra, intermediate algebra, and trigonometry. At the Center students work at their own pace; they also study and test independently in a pleasant and relaxing environment.

SUPPORTIVE SERVICES CENTER

The Supportive Services 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), visual devices, and adaptive computer equipment. All programs are accessible and facilities are tailored to meet individual needs.
ACADEMIC COMPUTING

Use of the instructional computers by students at Bakersfield College is encouraged. Access to academic computing services is a privilege enjoyed by all students, whether enrolled in a course involving computer use or by permission of the Director of Academic Computing.

Computer Studies
Some of the most promising career opportunities of the present and future are in the areas of computer systems analysis, programming, and operations. Bakersfield College offers courses in computer science and data processing for business, scientific/engineering and personal applications. Transfer, Associate Degree, and certificate programs are available.

Academic Computing Support Services
Most of the academic departments at Bakersfield College use the computer directly in instruction. This includes programming instruction by the Computer Studies Department and Computer Assisted Instruction in areas as diverse as chemistry, English, and agriculture. This use is supported by the Academic Computing Center which aids faculty in the development of academic computing applications.

Academic Computing Center
The Academic Computing Center directs the operation of the academic computing equipment at Bakersfield College. This equipment now includes two time sharing systems and a substantial number of microcomputers. Most college programs have one or more terminals or microcomputers available in their areas.

Unauthorized access or use of academic computing facilities is in violation of Section 502.b-c of the California Penal Code. Offenders will be disciplined and/or prosecuted in accordance with existing college policy and California law.

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, with emphasis 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 Instruction.

USE OF COLLEGE FACILITIES
Any campus or community group desiring use of facilities on the Bakersfield College should submit a facility request form which can be obtained at the Maintenance and Operations Office, SE 43. The Maintenance and Operations Office will assist you in the scheduling of facilities for lectures, seminars, meetings and conferences. For more information please call 395-4221.
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 for groups of 35 to 65 people. Community Services handles reservations for the planetarium and may be contacted by telephoning 395-4537.

WEILL INSTITUTE

The Weill Institute, at 21st and Chester in downtown Bakersfield, is centrally located and easily reached by public transportation. The institute is a unique development offering a wide range of classes. It provides business and professional persons with a campus that offers job training opportunities with a variety of individualized, open-entry courses, short-term courses, and the traditional semester-length courses.

Career and vocational programs include word processing and secretarial, accounting and business math, management, marketing, real estate, mathematics, electronics, administration of justice and corrections. A variety of transfer and general education courses enable students to plan transfer programs and meet requirements for an Associate in Arts degree. Weill Institute features a math lab, career academic counseling center, and an assessment center.

The open-entry plan allows students, depending upon their desires and needs, to enroll at any time during the semester 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 over 500 students each semester in the Northern Kern County and Southern Tulare County area. With its modern facility, 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 lifelong learning philosophy of the Kern Community College District. Classes meet afternoons and evenings for maximum convenience for students employed during the day.

COOPERATIVE WORK EXPERIENCE EDUCATION

Bakersfield College, in cooperation with business, industry and the community, makes it possible for students to earn elective credit toward a degree and/or certificate through employment experience. The college may grant credit to a student in an amount not to exceed four (4) units per semester for part-time occupational work experience or three (3) units per semester for general work experience. Full-time summer-work experience can also qualify for credit.
TYPES OF COOPERATIVE WORK EXPERIENCE EDUCATION

A. General Work Experience Education (W EXP 250) is supervised employment of students. It is intended to assist them in acquiring desirable work habits, career awareness and positive job attitudes. The jobs held by students need not be related to their occupational goals or college program. Contact the General Work Experience Coordinator or the Job Placement Office for more information.

B. An Internship or Occupational Experience Education (W EXP 249) is the extension of classroom occupational learning opportunities and career awareness into employment related to the student’s college program or major. Work Experience credit may be transferable to many colleges and universities. Contact a counselor or work experience coordinator for specific information.
ACADEMIC ELIGIBILITY
A high school graduate or anyone who has a Certificate of Proficiency may be admitted to Bakersfield College.

Students 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 Assistant Dean of Students.

Any person 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 must be on file in the Admissions and Records office before an Application for Admission may be processed.

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: Coachella Valley, Compton, Fremont-Newark (Ohlone College), Gavilan, Mendocino, Merced, Mt. San Jacinto, Palomar, Santa Clarita (College of the Canyons), Siskiyou, West Hills. 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.

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.

Students who have not attended Bakersfield College since the Fall 1981 semester, must file an Application for Admission.

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.
STUDENT MATRICULATION PLAN

Matriculation is a process whereby Bakersfield College and its enrolled students enter into an agreement for the purposes of achieving each student's stated educational objectives. Responsibility for the attainment of these objectives is maintained by both the college and student. Through the college's established programs, policies and requirements it provides the necessary components to accomplish these goals. Students are responsible for complying with all college policies and programs, as well as progressing toward their educational goal in accordance with the academic standards established by the college and the State of California.

The Student Matriculation Plan is comprised of three mandatory components: Assessment, Orientation, and Counseling/Advising. The chart below depicts the criteria that have been established by the college for the exemption of students from one or more of these three matriculation components. Students may contact the Counseling Center for assistance in determining their status regarding the matriculation process.

STUDENT MATRICULATION PLAN: Component Exemption Criteria

<table>
<thead>
<tr>
<th>EXEMPTION CRITERIA</th>
<th>MATRICULATION COMPONENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Assessment</td>
</tr>
<tr>
<td>1. Students who have completed an associate degree or higher:</td>
<td></td>
</tr>
<tr>
<td>2. Students who can provide scores which comply with College adopted equivalencies:</td>
<td></td>
</tr>
<tr>
<td>3. Students who enroll only in courses which have no skill level prerequisites:</td>
<td></td>
</tr>
<tr>
<td>4. Students who are admitted into a program of courses only after extensive assessment and evaluation completed by another approved agency may be exempt from:</td>
<td></td>
</tr>
<tr>
<td>Examples are:</td>
<td></td>
</tr>
<tr>
<td>Kern County Regional Criminal Justice Training Academy</td>
<td></td>
</tr>
<tr>
<td>Kern County Joint Fire Training Academy</td>
<td></td>
</tr>
<tr>
<td>Apprentice Training</td>
<td></td>
</tr>
<tr>
<td>Handicapped Program</td>
<td></td>
</tr>
<tr>
<td>Learning Disabled</td>
<td></td>
</tr>
<tr>
<td>These programs are to be identified by the Colleges and submitted to the District for official documentation.</td>
<td></td>
</tr>
<tr>
<td>5. Students transferring from another college who have completed course work with &quot;C&quot; grades, including general education courses that provide evidence of skills in language, reading and mathematics, or completion of a course within a college orientation program:</td>
<td></td>
</tr>
<tr>
<td>6. Students enrolled in Contract Instruction courses may be exempt from:</td>
<td></td>
</tr>
<tr>
<td>7. The Dean of Students or his/her designee may, upon appeal, exempt students for extenuating circumstances not covered by this policy:</td>
<td></td>
</tr>
</tbody>
</table>

“*” Denotes students exempt from particular matriculation component.
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. Enrollment in an English composition course (English 1a, English 1, English 60, Learning Skills 68) requires the writing of an English essay. The Assessment Center coordinates the assessment program. English essays may be written at the Center during regular office hours. Reservations for assessment testing may be arranged at the Assessment Center or by calling 395-4479.

Academic skill assessment can be waived in two ways: 1) by providing proof of completion of 15 or more transferable general education courses from another accredited four-year or two-year college; OR 2) by providing proof of eligibility for admission to a California State University with the appropriate combination of SAT or ACT scores and high school grade point average. These waivers require completion of a form available at all Admissions and Records locations of Bakersfield College and at the Assessment Center. This form must be submitted with the documents described in number one or two above.

For students who wish to explore career options, aptitude and interest, assessments are available in the Assessment Center.

ASSESSMENT POLICY FOR LEARNING/PHYSICALLY DISABLED STUDENTS

Bakersfield College assures each student an equal opportunity to demonstrate competency or knowledge in a subject area at any point in the matriculation process. Students with disabilities are expected to demonstrate the same competency or knowledge as their able-bodied peers.

Accommodations may be made on an individual basis in the method or format of examination. These accommodations may be requested by the faculty member, Supportive Services staff, learning disabilities specialist, or the student. Such accommodations may include, but are not limited to, an extension of time, the use of a typewriter, the use of a computer, the use of a tape recorder and, where appropriate to the disability, an alternative mode of assessment.

PRELIMINARY ACADEMIC PLANNING

All students who are new to the college should visit the Admissions and Records Office. A counselor 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 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 program.

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, 35 or 106, Title 38 U.S. Code—

<table>
<thead>
<tr>
<th>Semester</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full time</td>
<td>12 units</td>
</tr>
<tr>
<td>Three-fourths time</td>
<td>9-11 units</td>
</tr>
<tr>
<td>One-half time</td>
<td>6-8 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). Student athletes must maintain a “C” average grade (2.0 grade point average) or higher.

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

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.

Registration dates are indicated in the calendar in the front of this catalog.

FEES

Community College Enrollment Fees

The enrollment fee is $5 per unit up to a maximum of $50.
Student Health Fee

A $5 student health fee has been authorized by the Board of Trustees for all students attending classes on the main campus. The purpose of the fee is (1) to make health-center services available to all main campus students and (2) to provide greater health-care educational programming.

Health Fee Exemption Procedures

The following Health Fee exemptions are authorized by law:

1. Students who depend exclusively upon prayer for healing in accordance with the teachings of a bona fide religious sect, denomination, or organization;
2. Students who are attending a community college under an approved apprenticeship training program;
3. Employees of the Kern Community College District;
4. Low-income students;
5. Aid to Families with Dependent Children recipients;
6. Supplemental Social Security Income/State Supplementary Program recipients; and
7. General assistance program recipients.

Course Audit Fee

Students auditing credit classes shall be charged enrollment fees, unless enrolled in six (6) or more units during that semester. Enrollment status may not be changed from credit to audit or from audit to credit, and priority in class enrollment is given to students desiring to enroll for course credit.

Non-Resident Tuition Fee

Non-resident students are required by state law to pay tuition. The tuition fee for non-resident students is $90 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.

Miscellaneous Fees

The student body membership is fixed at $5.00 per semester.

Parking on the main campus, Weill Institute, and at West High School is restricted to parking permit holders. A semester parking permit is $5.00.

The College Bookstore is open year-round except during college holidays. It is estimated that the cost of books and supplies will be $125.00 to $150.00 per semester for a 15-unit schedule.

Students must supply their own suits for physical education class work.
Refunds

Community College Enrollment Fee Refunds

Enrollment fees are refundable, when applicable, for program changes through the first two weeks of the semester. The refund must be requested by the student presenting the original receipt and appropriate drop forms to the Admissions and Records Office. If the college cancels a class in which the student is registered and there is a reduction in units which will result in a lower fee, the refund must be requested by the student presenting the original receipt to the Admissions and Records office.

Non-Resident Tuition Refunds

Tuition is refundable, when applicable, for program changes through the first two weeks of the semester. The refund must be requested by the student presenting the original receipt and appropriate drop forms to the Admissions and Records Office.

Health Fee Refund Procedure

1. A student will be credited a health fee refund if all registered classes on the main campus are dropped, and an enrollment fee refund is generated by a main campus class during the transaction.

2. A student entitled to receive the health fee refund must:
   a) Apply for the refund using the appropriate campus refund request form; and
   b) Present an appropriate course registration receipt for all fees paid.
Grading System

Grades are earned and awarded in each course and are recorded on the student’s permanent record at the end of each academic term. 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>AU - Audit</td>
<td>0 per unit</td>
</tr>
<tr>
<td>CR - Credit</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>NC - No Credit</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>

AU - Audit

A student may audit a Bakersfield College course with certain enrollment restrictions. Course auditing procedures may be obtained at the Admissions and Records Office.

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 nursing and special remedial programs.

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. A list of the courses that may be taken on a credit-no credit basis or for a letter grade may be obtained in the Counseling Center or in the Admissions and Records Office.

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 in lieu of the "I" 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 the succeeding semester in order to receive credit and a course grade. The grade and unit credit will appear on the student's permanent record for the term in which the course work is completed. In open-entry/open-exit courses, the instructor must submit an evaluative grade which will be
entered on the permanent record in lieu of the “IP” 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

Subject to certain conditions a student may petition for credit by examination after the completion of twelve (12) semester units at Bakersfield College, providing the student is currently enrolled and in good standing. Information on the policy and procedures for challenging a course for credit by examination may be obtained at the Counseling Center.

The student’s permanent record will be annotated to indicate the credit was granted by examination. Credit by examination may not be counted as part of any attendance period.

ADVANCED PLACEMENT PROGRAM

Bakersfield College grants credit toward its associate degree and to meet transfer requirements for successful completion of examination of the Advanced Placement Program of the College Entrance Examination Board. Students who score three or better may be granted up to six semester units of college credit per examination in accordance with established college standards. Further information may be obtained from the Counseling Center.

A residency of twelve (12) semester units of satisfactory work must be completed at Bakersfield College prior to granting of credit under this program.

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

The College Level Examination Program is designed to be a means through which recognition, academic credit, and placement may be given for less conventional forms of educational experience. Those who may have reached a college level of education through home or correspondence study, on-the-job training, television courses, military service or other means may take the CLEP examinations which are offered by the College Entrance Examination Board. Credits earned through CLEP will be included among the maximum of 30 units of Credit by Examination which may be credited toward the associate degree. Further information may be obtained from the Counseling Center.

A residency of twelve (12) semester units of satisfactory work must be completed at Bakersfield College prior to granting of credit under this program.
MILITARY CREDIT

Bakersfield College will grant credit to veterans for specific service experience and certain educational training completed while in the service. Evaluation of such experience and training will be made by the Admissions and 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.

A residency of twelve (12) semester units of satisfactory work must be completed at Bakersfield College prior to granting of credit under this 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.

Students on probation may be limited to specific courses and to the number of units which may be attempted.

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 academic term.

REMOVAL FROM PROBATION

A student on academic probation for a grade point deficiency shall be removed from probation when the student’s cumulative 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 three consecutive semesters of enrollment shall be disqualified for admission to classes the following semester.

Any student who is placed on progress probation for three 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 Disqualification/Readmission Committee. A readmitted student may be restricted to specific courses or programs and a limitation may be placed on the number of units attempted.

COURSE REPETITION

Certain Bakersfield College classes are identified as repeatable courses. All other classes may be repeatable only once for credit if one or more of the following conditions exist:

A student may file a petition with the Admissions and Records Office to repeat a course in which (1) a grade lower than a “C” or its equivalent has been earned; (2) the student’s previous grade was in part the result of extenuating circumstances, such as verified cases of illness, accidents, or other circumstances beyond the control of the student; or (3) a significant lapse of time has occurred since the student previously enrolled in the course.

A student may also petition the Admissions and Records Office to calculate only the most recent 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 student’s permanent record. The college can provide no assurance that repeated courses will be treated in a similar manner by other educational 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.
WITHDRAWING FROM CLASSES

Students are responsible for officially withdrawing from any class or classes in which they no longer wish to be enrolled. Non-attendance does not release the student from this responsibility.

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

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.

A student (or student's representative) may contact the Admissions and Records Office regarding the procedure to withdraw after the final withdrawal date deadline if there are verifiable extenuating circumstances. This must be done by the last day of classes and prior to the beginning of the final examination period for the term in which the withdrawal will apply.

"W's" are not used in calculating the grade point averages, but excessive "W's" will be used as factors in probation and dismissal.

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 prior to the beginning of the semester, 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.

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 should 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.

Students are responsible for officially withdrawing from any class or classes in which they no longer wish to be enrolled. Non-attendance does not release the student from this responsibility.

**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 Director of Student Activities' Office.

**LIBRARY REGULATIONS**

All registered students are encouraged to visit the Library resources and services. Library cards are required and are issued at the circulation desk. Books may be checked out for three weeks if not on restricted reserve or reference. Fines are imposed for overdue materials. Information on library hours and regulations is given in the Student Handbook or may be obtained from a library staff member.

**FINAL EXAMINATIONS**

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

PRESIDENT'S SCHOLARS

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 Honors-at-Entrance 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. Contact the Dean of Students or your high school counselor for more information.

GRADE CHANGES

The instructor of the course shall determine the grade to be awarded to each student. The determination of the student's grade by the instructor is final in the absence of mistake, fraud, bad faith, or incompetency.

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 by the instructor to the Admissions and Records Office.

GRADE REPORTS

Final grades will be made available to students as soon as possible after the end of each academic term. There will be no additional notification of grades made up or corrected.

CHANGE OF ADDRESS, TELEPHONE NUMBER OR NAME

Students must officially notify the Admissions and Records Office when there is a change in their address, telephone number or name. Students will be held responsible for all mail missent or for not receiving information.
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. Students may also request an unofficial student copy of their transcript for their own personal reference. Each student is entitled to two free transcripts; thereafter, a fee of $2.00 is charged for each transcript.

Transcript requests are usually processed within three working days. An additional fee of $5.00 is charged for processing a transcript request immediately.

VERIFICATION OF ENROLLMENT

The Admissions and Records Office will complete a verification of enrollment upon written request by the student. A fee of $2.00 is charged for each verification.

STUDENT’S SCHEDULE OF CLASSES

At the time of registration each student is provided with a copy of his/her current schedule of classes. There is a $1.00 fee for each additional copy requested by the student.

HOLDS ON RECORDS AND REGISTRATION

A hold will be placed on a student’s record whenever that student is delinquent or has failed to pay any debt owed to the college or failed to return any library books or other college property or equipment. Students with holds will not be allowed to: register; receive transcripts, certificates or diplomas; have transcripts forwarded; and/or receive other services related to student records. When the student has cleared the obligation with the college, the hold will be removed.
STUDENT SERVICES

COUNSELING

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 assessment scores and current levels of performance or achievements as those factors relate to their college planning and in preparing for a chosen major or occupation;

2. To assist students in their exploration of options and decision-making in educational planning;

3. To assist students in analyzing study difficulties or other conditions and circumstances which present obstacles to the successful completion of their goals;

4. To focus upon resolving probation, disqualification, or other problems that affect student academic progress;

5. To provide students with current information concerning requirements for a wide variety of jobs and careers;

6. To provide information, in conjunction with the Transfer Center, pertaining to the admissions requirements of other colleges and universities;

7. To prepare students for employment when they complete their formal schooling at Bakersfield College; and

8. To provide student referrals to other offices or resources on campus or within the community in the event that such referrals are needed.

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.

Detailed career information regarding job requirements and general employment trends is available in the Career Development Center. Two computer-based career systems are available: Eureka, the California Information System, helps students determine career possibilities and educational programs to prepare for employment in California. Discover, a system designed by the American College Testing program,
allows students to interact with computer information related to career development. Student values, interests, and aptitudes, as well as decision-making abilities may be enhanced by working with a counselor and these career information systems.

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 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 the 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 restricted to students who are registered for 12 or more units of regular college work. 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 residence hall 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

Upon acceptance to the residence halls, 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 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 provides 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 Supportive Services 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 Job Placement Center assists students in finding part-time work while attending college, and upon graduation, assistance is available in locating full-time career opportunities. For those students seeking part-time employment, an effort is made to locate work that is related to their vocational objective. It is not always possible to secure employment immediately and new students who plan to be self-supporting should not begin their college courses without sufficient funds to cover the major expenses of at least the first semester.
Referrals for interviews are made on the basis of employer hiring requirements. Since employers rely upon the college to furnish them with information helpful in evaluating applicants, the Job Placement Center works in close cooperation with department chairpersons and instructors.

Regularly scheduled workshops are offered on job interview techniques, job search skills, and resume preparation.

Students desiring assistance in obtaining full-time career positions are urged to register with the Job Placement Center early during their year of graduation. The placement services are available at no charge to the student or employer.

The Job Placement Center is located in the Counseling Area in the Student Services Building, Room 28-29.

**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 Admissions and 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
BAKERSFIELD COLLEGE

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 grant program to pay the enrollment fee for California residents. The BOGG is available for students that have already qualified for other types of financial aid, and for students who have exceptionally low incomes including recipients of AFDC, SSI or General Assistance.

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.

PERKINS LOANS Federal program of low-interest, long-term repayment loans in amounts based on financial need up to $1000 annually.

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

SHORT-TERM LOANS Loans of $75 or less for emergency needs repayable within 30 days at no interest.

PART-TIME EMPLOYMENT:

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

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.

The Judicial Board—the Student Court—is composed of a Chief Justice and four Associate Justices 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 violations of the ASBC Legal Code.

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. Students find that campus organizations stimulate new interests, provide opportunities to develop leadership qualities and enhance college and community life. 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 Office, Campus Center, Room 4.

STUDENT CENTERS

Chicano Cultural Center

The Chicano Cultural Center of Bakersfield College offers a variety of services to students and the community. The Center, located in Business Building Room B-1, has over 700 Spanish language books that include Chicano, and Latin American history, politics, education, music and literature. Research materials such as newspaper and journal articles, research papers, and maps, which deal with the heritage of the Chicano are also available.

MULTICULTURAL ADVANCEMENT PROJECT—Bakersfield College recognizes the importance of reaching out to the local minority communities to help alleviate the problem of underrepresentation on the college campus. Through the Vocational Education Act funding, information regarding educational and career opportunities, registration procedures, financial aid information, and student services are made available. Black, Hispanic, American Indian, Women and other underrepresented
groups are the target of the Project Team. The team consists of counselors, faculty, staff, and advisors who will offer a variety of outreach services.

SUMMER READINESS PROGRAM—This is a week-long simulation of the actual conditions that students face when they attend Bakersfield College. Assessment, assigned and monitored homework, study skills, math, English, counseling, physical education and vocational awareness are all parts of the program. A number of one-week sessions are offered in the summer and the students are kept busy from 8 a.m. to 11 p.m. each day. The last session will be aimed at outlying Kern County students and will have them housed in the Bakersfield College dorms.

The students are chosen on the basis of Bakersfield College Assessment Test scores, high school GPA's, counselor recommendations and interviews. On completion of the program, each student will receive two units of college credit. Selection for the program is seen as a big step toward educational and career success.

MEXICAN HERITAGE PROJECT—A project that is devoted to the development and the maintenance of an archival collection of photographs, oral histories, and materials related to the Mexican Heritage of Kern County.

International Student Center

The International Student Center at Bakersfield College offers many services for American and foreign-born students and for the community. Foreign-born students may see the Foreign Student Advisor for help with placement in English classes and planning their schedules. They may also receive free tutoring in English. Help with personal, job or housing problems is also available. A special library of travel-study materials is available for those who wish to study abroad, and members of the community can find assistance with translation or tutoring in other languages through the International Student Center. A speakers bureau of foreign students is also available to present talks about their countries to local organizations. The Center also has a comfortable lounge area which features displays of artifacts from other countries loaned by Bakersfield College foreign students.

Martin Luther King, Jr., Center

The Martin Luther King, Jr., Center, formerly the Black Culture Learning Center, opened in February, 1983. The basic objective of the Center is to provide a learning atmosphere that will assist in personal, vocational, and educational needs for students who earn the A.A. degree as well as students who intend to transfer to a four-year college. The center provides information concerning community colleges, state colleges, universities, Black Colleges, transfer requirements, scholarship standards and requirements, financial aid opportunities and registration assistance. The Center is coordinated by a faculty member and is administered by a working staff derived from Black Student Union members, an advisory committee, a M.L.K. secretary and peer counselors. The Center is located in the Campus Center, Room 27, and is open daily, Monday through Friday.
Re-entry/Resource Center

The Re-entry/Resource Center is the hub of activity for students returning to college after a number of years out of the classroom or job market. The Center offers support, personal and academic counseling, referrals, resource materials, guest speakers, as well as a relaxing atmosphere. Students have access to an extensive collection of books, periodicals and reference materials related to health, career development and many other pertinent topics.

The Center houses the General Studies Department, Gender Equity in Vocational Education and the OPTIONS Program (Opportunity Program Training Individuals for Occupational and Non-traditional career Success), and the President’s Re-entry Scholarship Program.

OPTIONS enables students to evaluate their talents and interests, set meaningful goals for themselves and prepare for success in careers matched to their skills and aptitudes. Students are encouraged to investigate non-traditional career programs if their skills indicate potential success in a particular area.

The Re-entry/Resource Center, Humanities 11, is open Monday through Friday, 8:00 a.m. to 4:00 p.m. The Center has a comfortable lounge where students and faculty drop-in for a cup of coffee before class or to study between classes.

Transfer Center

The Transfer Center is designed to assist students interested in transferring to a four-year institution after attending Bakersfield College. The Center provides information on transferring of credits, admissions, financial aid, housing and other student services at the transferring institution. Students with general questions or special problems in the transfer process should seek assistance in the Transfer Center.

CALIFORNIA ARTICULATION NUMBER SYSTEM

The California Articulation Number (CAN) System provides a cross reference number for courses which have been evaluated by faculty and determined to be acceptable "in lieu of" each other. Only lower division, transferable, introductory courses commonly taught on two- and four-year college and university campuses are included in the CAN System.

The CAN System is not a common numbering system. Each campus retains its own course numbers, prefixes, and titles. The CAN (e.g. CAN ENGL 2) is listed parenthetically in catalog descriptions, class schedules, and other publications as appropriate.

The CAN designation is assurance that the course or sequence of courses will be accepted in lieu of an identically designated CAN course or sequence at all participating campuses in California. Information regarding the CAN System is available in the Transfer Center.
POLICY CONCERNING SEXUAL HARASSMENT

Bakersfield College is fully committed to all federal, state, and local human rights and equal opportunity laws. *Title VII of the Civil Rights Act of 1964*, and *Title IX of the Educational Amendments of 1972* are strictly enforced. This legislation specifically prohibits sexual discrimination in employment, and educational programs and services respectively.

Students have the right to gain access to and complete an educational program at Bakersfield College. Interference with students' admission to and successful completion of their education by any person through unlawful sexual conduct will not be tolerated. The college will initiate disciplinary action against persons found to have interfered with a student's education through any means of sexual harassment or intimidation.

The Bakersfield College *Reneguide* sets forth a statement of Students Rights and Responsibilities, including the complete sexual harassment policy and grievance procedures. Students should refer to this publication for further information.
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 1988 – 1989

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: Completion of English 1 with a minimum grade of "C" and satisfactory completion of Competency Examination; or placement into English 1a by Essay Placement Test and completion of English 1a with a minimum grade of "D."
B. Mathematics: One year of high school algebra or MATH A with a minimum grade of "C"; or an equivalent score on the Placement/Assessment.

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

CONTINUOUS ENROLLMENT

Catalog rights is defined as enrollment in one unit of study during a twelve (12) month calendar year. Students have the right to petition the Dean of Instruction in A-15 for exceptions.

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. Completion of at least three (3) units in each of the following areas: Composition, 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 (May be included in the above general requirements)

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

2. Speech .................................................. 3 units
   Spch 1, 2, 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*), 33, 40*;
   Pol S 1; Soc S 51*.

   Group II: Hist 4b, 8b*, 17b*, 18b*, 20b*, 30b*-(Ch St 30b*)' 33, 36*,
   38; Pol S 1.
(b) Other Social Science Courses: Any listed above, or Jrm 1*.

4. Behavioral Sciences ....................................................... 3 units
   Anth 2, 5; Bus 58; Psych 1a, 1ah, 51; Soc 1, 36 (Ch St 36), 50; Ch Dv 13a.

5. Natural Sciences .......................................................... 3 units
   Life Sciences: Anat 1; Anth 1; Biol 1a, 1b, 11, 53; Envr 1; Hi Sc 1; Nutr 10;
   Entm 1; Fores 2; Orn H 6; Soils 1.
   Physical Sciences: Astr 1; Chem 1a, 2a, 11; Geog 1, 1L; Geol 1a, 10 10L;
   Phy S 10, 11; Physc 2a, 4a.

6. Humanities ................................................................. 3 units
   Arch 1, 10.
   Art 1, 2ab, 2ef, 3ab, 3cd, 3ef, 5ab, 6ab, 7ab, 9ab, 11ab, 13ab, 17ab, 30a,
   30b, 30c, 30d, 33ab.
   Brdcs 1b, 2.
   Engl 1b, 2, 5a, 5b, 11, 12, 21*, 27, 28, 29, 30a, 30b, 35, 41a, 41b, 41c,
   41d, 65.
   Fren 1ab, 2ab, 3, 4, 52a, 52b; Germ 1ab, 2ab, 3, 4, 52ab; Latin 1, 2; Span
   1ab*, 2ab*, 3*, 4*, 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, 15a, 15b, 17a, 17b, 17c, 17d, 21ab,
   22abc, 23*, 27.
   Phil 6a, 6b, 10, 12, 14, 30, 32*, 33, 37.
   Sp Ed 11.
   Theat 1, 2ab, 4, 5, 6, 7, 8, 12c, 27, 30, 31, 32, 35, 227.

7. Mathematics, Logic, Computer Science ............................... 3 units
   Bus 251, 53, 253.
   Com S 5, 10, 18.
   Engr 19f/19p (Com S 19f/19p).
GRADUATION, CERTIFICATE AND TRANSFER REQUIREMENTS

Math A, B, C, D, 1, 2, 6a, 22, 50, 200a, 200c, 200d, 250, Tec M 53a.

Phil 7.

8. Health Education ...................................................... 2 units

H Ed 1, 2, 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 32, and Music 19ad. (Students who have observed their 21st birthday or who have a medical excuse are exempt.)

10. Counseling ............................................................... 0.5 unit

Agriculture: Agric 10; Orn H 1.

Child Development: Ch Dv 54.

Counseling: Couns 1, 11, 13a (Gn St 13a), 13b (Gn St 13b), 52.

Food Service: Fd Sv 1.

General Studies: Gn St 13a (Couns 13a), 13b (Couns 13b).

Health Careers: Nurs 1.

Physical Science: Arch 1, Engr 48, In Dr 1.

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

Associate in Science Degree

A. GENERAL REQUIREMENTS

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: Composition, 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, 51.

3. Social Sciences .................................................................................................. 3 units
   (a) American History and Politics:
       Group I: Hist 4a, 8a*, 17a*, 18a*, 20a*, 30a*-(Ch St 30a*), 33, 40*; Pol S 1; Soc Sci 51*.
       Group II: Hist 4b, 8b*, 17b*, 18b*, 20b*, 30b*-(Ch St 30b*), 33, 36*, 38; Pol S 1.
   (b) Other Social Science Courses: Any listed above, or Jrnl 1*.

4. Behavioral Science ............................................................................................. 3 units
   Anth 2, 5; Bus 58; Psych 1a, 1ah, 51; Soc 1, 36 (Ch St 36), 50.
   Ch Dv 13a.

5. Natural Sciences .................................................................................................. 3 units
   Life Sciences: Anat 1; Anth 1; Biol 1a, 1b, 11, 53; Envir 1; Hi Sc 1; Nutr 10;
   Entm 1; Fores 2; Orn H 6; Soils 1.
   Physical Sciences: Astr 1; Chem 1a, 2a, 11; Geog 1, Geog 1L; Geol 1a, 10, 10L; Phy S 10, 11; Physc 2a, 4a.

6. Humanities ......................................................................................................... 3 units
   Arch 1, 10.
   Art 1, 2ab, 2ef, 3ab, 3cd, 3ef, 5ab, 6ab, 7ab, 9ab, 11ab, 13ab, 17ab, 30a, 30b, 30c, 30d, 33ab.
Brds 1b, 2.

Engl 1b, 2, 5a, 5b, 11, 12, 21*, 27, 28, 29, 30a, 30b, 35, 41a, 41b, 41c, 41d, 65

Fren 1ab, 2ab, 3, 4, 52a, 52b; Germ 1ab, 2ab, 3, 4, 52ab; Latin 1, 2; Span 1ab*, 2ab*, 3*, 4*, 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, 15a, 17a, 17b, 17c, 17d, 21ab, 22abc, 23*, 27.

Phil 6a, 6b, 10, 12, 14, 30, 32*, 33, 37.

Sp Ed 11.

Theat 1, 2ab, 4, 5, 6, 7, 8, 12c, 27, 30, 31, 32, 35, 227.

7. Mathematics, Logic, Computer Science ........................................... 3 units

Bus 251, 53, 253.

Com S 5, 10, 18.

Engr 19f/19p (Com S 19f/19p).

Math A, B, C, D, 1, 2, 6a, 22, 50, 53a, 200a, 200c, 200d, 250, Tec M 53a.

Phil 7.

8. Health Education ................................................................. 2 units

H Ed 1, 2, 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 32, and Music 19ad. (Students who have observed their 21st birthday or who have a medical excuse are exempt.)

10. Counseling ................................................................. 0.5 unit

Agriculture: Agric 10; Orn H 1.

Child Development: Ch Dv 54.
Counseling: Couns 1, 11, 13a (Gn St 13a), 13b (Gn St 13b), 52.

Food Service: Fd Sv 1.

General Studies: Gn St 13a (Couns 13a), 13b (Couns 13b).

Health Careers: Nurs 1.

Physical Science: Arch 1, Engr 48, In Dr 1.

*Cross Cultural Awareness: Students must complete at least one class identified 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 requirements outlined in Title V and must be approved as an appropriate major by the Curriculum Committee.

ADDITIONAL ASSOCIATE DEGREES

An Associate in Arts or Associate in Science degree will be awarded to those already possessing an associate or higher degree or degrees, subject to the following conditions:

1. All requirements in a different major from that of previous associate or higher degree(s) must be satisfied.

2. All general education requirements in effect at the time of beginning the new degree program must be satisfied.

3. At least 12 units, subsequent to the granting of any previous degree, must be taken in residence at Bakersfield College.

4. The student must be enrolled at Bakersfield College during the semester in which the degree requirements are completed.

5. Only one Associate in Arts, except as required for licensing and/or retraining, may be earned at Bakersfield College. Such exceptions must be approved by the Dean of Instruction. Additional Associate in Science degrees may be earned.

TRANSFER

Universities and colleges prescribe their own standards of eligibility for transfer. Admission practices of four-year institutions are in the 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 or at the University of California, the student must earn a minimum of 60 units of transferable credit.

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

ELIGIBILITY FOR THE CALIFORNIA STATE UNIVERSITIES: The student who was ineligible on the basis of his/her high school record may be admitted on the basis of obtaining at least a 2.0 grade point average in a minimum of 56 transferable units of community college work.

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 transferable units to a state university.

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 UC transferable units and make up any high school deficiencies in English and Mathematics.

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 UC transferable 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).

Selected institutions require either the Scholastic Aptitude Test or the American College Test from Community College transfers. Students are advised to consult with their counselor for information on these institutions.

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 transfer units. 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.
On the following pages are the general education requirements for the California State Universities. 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.

CALIFORNIA STATE UNIVERSITY—
GENERAL EDUCATION REQUIREMENTS — 1988-89

To be eligible for graduation with a Bachelor’s Degree from a California State University, 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 units must be upper division courses completed at the four-year university. Certification is not available to students with fewer than 24 applicable units.

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

Area A - Complete all.
Area B - Complete 9 units, including B.3.
Area C - Complete 9 units.
Area D - Complete 9 units.
Area E - Complete all.

All of the above must be completed to obtain maximum certification of 39 units.

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. COMMUNICATION IN THE ENGLISH LANGUAGE AND CRITICAL THINKING (9 units): One course from each section.
A.2. Written Communication: English 1a.
A.3. Critical Thinking: Phil 7, Engl 1b, 2 or Spch 5.

B. PHYSICAL UNIVERSE AND LIFE FORMS (9-12 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 1, 1L*; Astr 1; Chem 1a*, 2a*, 11*; Geol 1a*, 10, 10L*; Physc 2a*, 4a*; Phys Sc 10, 11*.
B.2. Life Forms: Anth 1; Anat 1*; Bact 2*; Biol 1a*, 1b*, 10, 10L*, 11*; Geol 7*; Hl Sc 1*; Phys 1*.
B.3 Laboratory activity identified by (*).
B.4. Mathematical Concepts, Quantitative Reasoning and Applications: Com S 5, 10, 18; Engr 19f/19p; Math C, 1, 2, 6a, 22, 200C; Psych 5.

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, 30d, 33ab; Gn St 36ab; Int D 15a, 22, 23a; Music 1a, 2, 10a, 10b, 10c, 10d, 21ab, 22abc, 23, 26a, 27; Phil 30; Theat 1, 2ab, 4, 5, 6, 7, 8, 27, 31*, 32*, 35, 227. *Limit of 3 units total for Theat 31, 32.
GRADUATION, CERTIFICATE AND TRANSFER REQUIREMENTS

C.2. Literature: Eng 1b, 5a, 5b, 11, 12, 21, 27, 28, 29, 30a, 30b, 35; Phil 30.
C.3. Philosophy: Phil 6a, 6b, 7, 10, 12, 14, 32, 33, 37.
C.4. Foreign Language: Fren 1ab, 2ab, 3, 4; Germ 1ab, 2ab, 3, 4; Latin 1, 2; Span 1ab, 2ab, 3, 4.
C.5. Active Participation: Art 2ab, 2ef, 3ab, 3cd, 3ef, 4ab, 4ef, 5ab, 5ef, 6ab, 7ab, 9ab, 11ab, 12ab, 13ab, 13cd, 14ab, 14cd, 14ef, 15ab, 15cd, 15ef, 17ab; Music 5abcd, 6abcd, 9a, 10abcd, 12abcd, 13abcd, 14abcd, 17abcd; Theat 4, 5, 6, 7, 8, 12c, 15, 17, 227.
C.6. Western Cultures: Art 30a, 30b, 30c, 30d, 33ab; Eng 5a, 5b, 11, 28, 30a, 30b; Fren 1ab, 2ab, 3, 4; Germ 1ab, 2ab, 3, 4; Latin 1, 2; Phil 6a, 6b, 33, 37; Span 1ab, 2ab, 3, 4.

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, 5; Ch Dv 13a; Ch St 36; Gn St 28; Hist 17a, 17b; Soc 1, 28, 30, 36.
D.2. Political Institutions: Ch St 30a, 30b; Hist 17a, 17b, 20a, 20b, 30a, 30b; Pol S 1, 2.
D.3. Economic Institutions: Bus A 20; Econ 1, 2.
D.4. Contemporary: Bus A 20; Ch Dv 13a; Ch St 30b, 36; Econ 1, 2, 10; Gn St 2; Hist 17a, 17b, 18b, 19b, 20a, 20b, 30b, 38; Pol S 1, 2; Psych 1a; Soc 1, 30, 36.
D.5. Historical: Anth 2, 3, 5; Ch St 30a, 30b, 31a; Hist 4a, 4b, 8a, 8b, 15a, 15b, 17a, 17b, 18a, 18b, 19a, 19b, 20a, 20b, 30a, 30b, 36, 38, 40.
D.6. Western Context: Hist 4a, 4b, 8a, 8b, 18a, 18b, 33, 40; Pol S 2.
D.7. Non-Western Context: Geog 2; Hist 19a, 19b, 38; Pol S 2.

E. LIFELONG 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; Fores 2; Gn St 1, 28, 37; H Ed 1; Nutr 10; Phil 12; Psych 1a, 30, 31.
E.2. Activity: Gn St 5edw; Ph Ed 3adp, 5, 6, 6ct, 6fa, 6hx, 7, 8, 9, 9sk, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 22, 25, 26, 27, 28, 29, 32.

F. UNITED STATES HISTORY, CONSTITUTION AND AMERICAN IDEALS:
F.1. Ch St 30a; Hist 8a, 17a, 18a, 20a, 30a, 36; Pol S 1.
F.2. Ch St 30b; Hist 8b, 17b, 18b, 20b, 30b; Pol S 1.
# 1988 BAKERSFIELD COLLEGE CERTIFICATE AND DEGREE PROGRAMS

<table>
<thead>
<tr>
<th>AGRICULTURE</th>
<th>Certificate</th>
<th>A.A. Degree</th>
<th>A.S. Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture Business Management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crop Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forestry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horticulture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanized Agriculture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ornamental Horticulture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ART</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Photography</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BEHAVIORAL SCIENCE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anthropology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BUSINESS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banking and Finance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bookkeeping</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Administration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Office</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal Secretary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management/Public Administration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secretarial</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Business</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Word Processing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weill Institute of B.C. ONLY:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Fast Track” Accounting/Payroll Clerk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Fast Track” Clerk Typist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program</td>
<td>Certificate</td>
<td>A.A. Degree</td>
<td>A.S. Degree</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>COMMUNICATIONS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broadcasting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journalism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Education (Sign Language)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speech</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>COMPUTER STUDIES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Information Systems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ENGLISH</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FAMILY AND CONSUMER EDUCATION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Development and Family Relations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Development with Special Education Emphasis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cook Apprentice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cosmetology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culinary Arts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dietary Managers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dietetic Service Supervisor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family and Consumer Studies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fashions and Textiles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Service Management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior Design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FOREIGN LANGUAGE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>German</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HEALTH CAREERS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dental Assisting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Medical Technology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiologic Technology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered Nursing</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
INDUSTRIAL TECHNOLOGY

Aeronautics
Apprenticeship
Brick/Tile Layers
Carpentry
Floor Covering
Inside Wireman Electrician
Operating Engineers
Painting/Decorating/Papering
Plastering/Cement Masonry
Plumbing/Pipefitting
Sheet Metal
Auto Body
Auto Brakes and Wheel Alignment
Auto Engine Overhaul
Auto Tune-up and Emission Control
Automatic Power Trains
Automotive Technology
Cabinetmaking
Computer Aided Manufacturing
Electronic Technology
Industrial Arts
Industrial Technology
Machine Tool Technology
Petroleum Technology
Surveying
Welding
Woodworking Technology

LIBERAL ARTS

LIFE SCIENCE
Bacteriology (Microbiology)
Biology
Clinical Laboratory Assistant
Pre-Dentistry
Pre-Law
Pre-Medicine
Pre-Optometry
Pre-Pharmacy
Pre-Veterinary Medicine

MATHEMATICS
### GRADUATION, CERTIFICATE AND TRANSFER REQUIREMENTS

<table>
<thead>
<tr>
<th>Program</th>
<th>Certificate</th>
<th>A.A. Degree</th>
<th>A.S. Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MUSIC</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PHILOSOPHY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PHYSICAL SCIENCE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architectural Drafting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architecture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Technology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Drawing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PUBLIC SERVICE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration of Justice/Criminology/Police Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Police Academy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correctional Administration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certified Fire Officer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chief Officer Certification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Technology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law Enforcement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SOCIAL SCIENCE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>History</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>THEATRE ARTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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.

ENGLISH, READING, AND MATHEMATICS CLASSIFICATIONS

Baccalaureate level classes generally require Level 1 classification in reading, Level 2 classification in English, and/or mathematics as appropriate. Students with a reading level of 2 may enroll in baccalaureate level classes with the permission of a counselor, advisor, or the instructor. Beginning Spring 1986, students with a reading level of 3 will not be eligible for baccalaureate classes having a Level 1 prerequisite. Placement in Level 1, 2, or 3 is based on student’s performance on the placement assessment (asset). Note: Reading and English levels A, B, C are now referred to as 1, 2, 3 respectively. English levels equate to Level 1 eligible for ENGL 1a; Level 2 eligible for ENGL 1; Level 3 eligible for ENGL 60 and Level 4 eligible for LRN S 68. Math levels have not been developed and assessment results give only score and course placement recommendation. Classification revisions from letter to numeric is as of Fall, 1988.

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: lect (lecture); lab (laboratory); demo (demonstration); CCS (Course Classification System); Repeat (Repeatability).

Hours given in parentheses ( ) are total hours for the course. Following the total hours is listed the number of hours required per week of lecture, laboratory, discussion, demonstration, practical exercises, etc. For example: Hours: (108) 2 lect, 4 lab. When courses are offered in shorter time blocks than a full semester, the number of hours/weeks are stated.

Repeatability is the number of times a course may be repeated. If repeatability is now shown, course may not be repeated.

Prerequisites are expressed as minimum requirements. For example, with a grade of “C” means that a grade of “C” or higher is acceptable. Prerequisites may be waived upon verification of competency in the prerequisites set forth. See counselor or instructor for specific information.
COURSE CLASSIFICATION SYSTEM

Bakersfield College uses a course classification system that serves to describe the total educational program of the community college as required by Title 5, Section 55001. Classes currently mandated by the State are designated as:

- Liberal Arts and Sciences
- Remedial Education
- Community Education — Personal
- Community Education — Parenting
- Community Education — Community and Civic Development
- Occupational Education

TRANSFERABILITY OF BAKERSFIELD COLLEGE COURSES

Transfer courses in the Bakersfield College curriculum are generally numbered 1 through 49. There are courses in the curriculum for the primary purpose of meeting requirements for an Associate in Arts Degree or an Associate in Science Degree and certificate programs that are also transferable to selected four-year institutions. The student is advised to consult with their counselor regarding these courses. Each course is listed as one of the following:

- Not Transferable: Not degree applicable.
- Not Transferable: Associate Degree only.
- California State University (CSU) and Private College.
- University of California System (UC), CSU and Private Colleges.
The Bakersfield College Agriculture Department offers three possible options for Agriculture. All Agriculture programs should be carefully planned by the student with assistance from the Agriculture Department Lead Advisor and departmental instructors.

**Two + Two Vocational Certificate Program**

Vocational skills training is the major emphasis of this program. Students must demonstrate competencies before completing these courses. Certificates of competencies are awarded subject to evaluation by the instructor and department chairperson.

**Certificate of Achievement**

Certificates are available in the following areas: Agricultural Business Management, Animal Science, Crop Science, Forestry, Mechanized Agriculture and Ornamental Horticulture.

**Associate Degree Programs**

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

**Transfer Program**

Students may use those units accumulated in the Associate Degree Programs for transfer to a four-year institution.

**TWO + TWO VOCATIONAL CERTIFICATE PROGRAM**

These training programs are designed for those students who prefer career specialization courses and the earliest possible opportunity for job placement and/or the establishment of a self-owned/operated business. Students wishing greater in-depth preparation are advised to take more advanced courses, seek an associate degree, or transfer to a four-year institution.
Certificates are available in the following areas: Agricultural Business Management, Animal Science, Crop Science, Forestry, Mechanized Agriculture and Ornamental Horticulture.

Each program must be approved by an Agriculture Department advisor, instructor, or Department Chairman.

### Required Courses

| CRP S 200 Gen Crop Skills | UN: 8.0 | MC AG 300 Tractor Serv/Oper | UN: 8.0 |
| CRP S 300 Appl Crop Prod Skls | UN: 8.0 | ORN H 200 Fund Nur Mgt/Pl Pro | UN: 8.0 |
| MC AG 200 Beg Mech Agricultur | UN: 8.0 | ORN H 300 Land Install/Maint | UN: 8.0 |

### CERTIFICATE OF ACHIEVEMENT PROGRAMS

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

Certificates are available in the following areas: Agricultural Business Management, Animal Science, Crop Science, Forestry, Mechanized Agriculture 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 advisor, instructor, or Department Chairman.

### AGRICULTURAL BUSINESS MANAGEMENT

**Minimum units required in discipline — 30**

#### Required Courses

| AG BS 2 Agricultural Econ | UN: 3.0 | AGRIC 10 Intro Calif Agric | UN: 3.0 |
| AG BS 3 Farm Accounting | UN: 3.0 | AGRIC 49 Ag Leadership Trng | UN: 2.0 |
| AG BS 4 Oper Use Ag Comptrs | UN: 3.0 | AN S 1 Interm Animal Sci | UN: 3.0 |
| AG BS 5 Agricultural Market | UN: 3.0 | CRP S 1 Prin Crop Productn | UN: 3.0 |
| AG BS 6 Intro Comptr App/Ag3.0 | UN: | | |

#### Electives — Minimum of 6 units

| BUS A 1A Prin of Accounting | UN: 3.0 | ORN H 6 Orn Plt Id/Grd Cov | UN: 3.0 |
| MC AG 2 Beginning Mech Ag | UN: 3.0 | SOILS 1 Intro Soil Science | UN: 3.0 |
Other Suggested Courses

COM S 5 Intro Prog w/BASIC (3), ENTM 1 Applied Entomology (3), FORES 1 Intro to Forestry (3), HORT 1 Prin Fruit Growing (3).

ANIMAL SCIENCE
Minimum units required in discipline — 26

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRIC 10</td>
<td>Intro Calif Agric</td>
<td>3.0</td>
<td>AN S 6</td>
</tr>
<tr>
<td>AGRIC 49</td>
<td>Ag Leadership Trng</td>
<td>2.0</td>
<td>AN S 7</td>
</tr>
<tr>
<td>AN S 1</td>
<td>Interim Animal Sci</td>
<td>3.0</td>
<td>CRP S 2</td>
</tr>
<tr>
<td>AN S 2</td>
<td>Beef Production</td>
<td>3.0</td>
<td>MC AG 2</td>
</tr>
<tr>
<td>AN S 3</td>
<td>Sheep Production</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>

Electives — Minimum of 6 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRP S 1</td>
<td>Prin Crop Productn</td>
<td>3.0</td>
<td>SOILS 1</td>
</tr>
</tbody>
</table>

Other Suggested Courses

AN S 8 Judging (2), AN S 10 Horse Production (3), AN S 11 Adv Horse Productn (3), ENTM 1 Applied Entomology (3), FORES 2 Natural Resources (3), FORES 3 Wildlife Management (3), AG BS 4 Oper Use Ag Comptrs (3), ORN H 6 Orn Plt Id/Grd Cov (3).

CROP SCIENCE
Minimum units required in discipline — 27

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRIC 10</td>
<td>Intro Calif Agric</td>
<td>3.0</td>
<td>CRP S 4</td>
</tr>
<tr>
<td>AGRIC 49</td>
<td>Ag Leadership Trng</td>
<td>3.0</td>
<td>CRP S 5</td>
</tr>
<tr>
<td>CRP S 1</td>
<td>Prin Crop Productn</td>
<td>3.0</td>
<td>SOILS 1</td>
</tr>
<tr>
<td>CRP S 2</td>
<td>Forage Crops</td>
<td>3.0</td>
<td>ENTM 1</td>
</tr>
<tr>
<td>CRP S 3</td>
<td>Row Crops</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>

Electives — Minimum of 6 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN S 1</td>
<td>Interim Animal Sci</td>
<td>3.0</td>
<td>MC AG 3</td>
</tr>
<tr>
<td>MC AG 2</td>
<td>Beginning Mech Ag</td>
<td>3.0</td>
<td>AG BS 4</td>
</tr>
</tbody>
</table>

Other Suggested Courses

AG BS 2 Agricultural Econ (3), FORES 1 Intro to Forestry (3), HORT 1 Prin Fruit Growing (3), ORN H 4 Plant Propagation (3), ORN H 6 Orn Plt Id/Grd Cov (3).
## FORESTRY

Minimum units required in discipline – 30

### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRIC 10</td>
<td>3.0</td>
<td>FORES 3</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRIC 49</td>
<td>2.0</td>
<td>MC AG 2</td>
<td>3.0</td>
</tr>
<tr>
<td>ENTM 1</td>
<td>3.0</td>
<td>ORN H 7</td>
<td>3.0</td>
</tr>
<tr>
<td>FORES 1</td>
<td>3.0</td>
<td>SOILS 1</td>
<td>3.0</td>
</tr>
<tr>
<td>FORES 2</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN S 1</td>
<td>3.0</td>
<td>ORN H 6</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Other Suggested Courses

AG BS 2 Agricultural Econ (3), FORES 4 Wildlife Law Enforc (3), FORES 5 Idnt Calif Wildlife (3), FORES 7 Wildland Fire Mngmt (3).

## MECHANIZED AGRICULTURE

Minimum units required in discipline – 23.5

### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRIC 10</td>
<td>3.0</td>
<td>CRP S 1</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRIC 11</td>
<td>1.0</td>
<td>MC AG 2</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRIC 12</td>
<td>1.0</td>
<td>MC AG 3</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRIC 49</td>
<td>3.0</td>
<td>MC AG 5</td>
<td>2.0</td>
</tr>
<tr>
<td>AG BS 54a</td>
<td>1.5</td>
<td>MC AG 59a</td>
<td>1.5</td>
</tr>
<tr>
<td>AG BS 54b</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Electives – Minimum of 6 units

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTM 1</td>
<td>3.0</td>
<td>ORN H 3</td>
<td>3.0</td>
</tr>
<tr>
<td>FORES 1</td>
<td>3.0</td>
<td>SOILS 1</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### Other Suggested Courses:

AG BS 2 Agriculture Econ (3), HORT 1 Prin Fruit Growing (3), ORN H 2 Fund Nur Mgt/Pl Pro (3), FORES 2 Natural Resources (3), ORN H 4 Plant Propagation (3).
ORNAMENTAL HORTICULTURE

Minimum units required in discipline — 26

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRIC 10</td>
<td>Intro Calif Agric</td>
<td>3.0</td>
<td>ORNH 5</td>
<td>Nursery Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRIC 49</td>
<td>Ag Leadership Trng</td>
<td>2.0</td>
<td>ORNH 6</td>
<td>Orn Plt Id/Grd Cov</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH 2</td>
<td>Fund Nur Mgt/Pl Pro</td>
<td>3.0</td>
<td>ORNH 7</td>
<td>Orn Plt Id/Lrg Shrb</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH 3</td>
<td>Land Install/Maint</td>
<td>3.0</td>
<td>SOILS 1</td>
<td>Intro Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH 4</td>
<td>Plant Propagation</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTM 1</td>
<td>Applied Entomology</td>
<td>3.0</td>
<td>MC AG 59a</td>
<td>Beg Eng/Equip Rep</td>
<td>1.5</td>
</tr>
<tr>
<td>HORT 1</td>
<td>Prin Fruit Growing</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Suggested Courses

MC AG 2 Beginning Mech Ag (3), AG BS 2 Agricultural Econ (3), FORES 1 Intro to Forestry (3), FORES 2 Natural Resources (3), CRP S 4 Prin Crop Productn (3).

ASSOCIATE IN ARTS DEGREE PROGRAMS

AGRICULTURAL BUSINESS MANAGEMENT

The Agricultural Business Management major is made up of agriculture and business courses pertaining to the agriculture industry.

Many jobs in agriculture require training in business courses such as accounting, typing and salesmanship. With a combination of agriculture and business courses, many employment opportunities are available.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG BS 2</td>
<td>Agricultural Econ</td>
<td>3.0</td>
<td>AG BS 5</td>
<td>Agricultural Market</td>
<td>3.0</td>
</tr>
<tr>
<td>AG BS 3</td>
<td>Farm Accounting</td>
<td>3.0</td>
<td>AGRIC 10</td>
<td>Intro Calif Agric</td>
<td>3.0</td>
</tr>
<tr>
<td>AG BS 4</td>
<td>Oper Use Ag Cmprs</td>
<td>3.0</td>
<td>AGRIC 49</td>
<td>Ag Leadership Trng</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN S 2</td>
<td>Beef Production</td>
<td>3.0</td>
<td>CRP S 3</td>
<td>Row Crops</td>
<td>3.0</td>
</tr>
<tr>
<td>AN S 3</td>
<td>Sheep Production</td>
<td>3.0</td>
<td>CRP S 4</td>
<td>Vegetable Productn</td>
<td>3.0</td>
</tr>
<tr>
<td>AN S 6</td>
<td>Appl Animal Nutrtin</td>
<td>3.0</td>
<td>ORNH 6</td>
<td>Orn Plt Id/Grd Cov</td>
<td>3.0</td>
</tr>
<tr>
<td>AN S 7</td>
<td>Livestock Diseases</td>
<td>3.0</td>
<td>ORNH 7</td>
<td>Orn Plt Id/Lrg Shrb</td>
<td>3.0</td>
</tr>
<tr>
<td>CRP S 2</td>
<td>Forage Crops</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## ANIMAL SCIENCE

The Animal Science 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 Name</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRIC 10</td>
<td>Intro Calif Agric</td>
<td>3.0</td>
<td>AN S 6</td>
<td>Appl Animal Nutrtn</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRIC 49</td>
<td>Ag Leadership Trng</td>
<td>2.0</td>
<td>CRP S 2</td>
<td>Forage Crops</td>
<td>3.0</td>
</tr>
<tr>
<td>AN S 1</td>
<td>Interm Animal Sci</td>
<td>3.0</td>
<td>SOILS 1</td>
<td>Intro Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>AH S 2</td>
<td>Beef Production</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG BS 2</td>
<td>Agricultural Econ</td>
<td>3.0</td>
<td>AN S 10</td>
<td>Horse Production</td>
<td>3.0</td>
</tr>
<tr>
<td>AG BS 3</td>
<td>Farm Accounting</td>
<td>3.0</td>
<td>AN S 11</td>
<td>Adv Horse Productn</td>
<td>3.0</td>
</tr>
<tr>
<td>AG BS 4</td>
<td>Oper Use Ag Comptrs</td>
<td>3.0</td>
<td>CRP S 1</td>
<td>Prin Crop Productn</td>
<td>3.0</td>
</tr>
<tr>
<td>AN S 3</td>
<td>Sheep Production</td>
<td>3.0</td>
<td>MC AG 2</td>
<td>Beginning Mech Ag</td>
<td>3.0</td>
</tr>
<tr>
<td>AN S 7</td>
<td>Livestock Diseases</td>
<td>3.0</td>
<td>MC AG 3</td>
<td>Tractor Ser/Oper</td>
<td>3.0</td>
</tr>
<tr>
<td>AN S 8</td>
<td>Judging</td>
<td>2.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## CROP SCIENCE

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.

### Minimum units required in discipline — 26

### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRIC 10</td>
<td>Intro to Calif Agric</td>
<td>3.0</td>
<td>CRP S 4</td>
<td>Vegetable Productn</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRIC 49</td>
<td>Ag Leadership Trng</td>
<td>2.0</td>
<td>CRP S 5</td>
<td>Weed Control</td>
<td>3.0</td>
</tr>
<tr>
<td>CRP S 1</td>
<td>Prin Crop Productn</td>
<td>3.0</td>
<td>ENTM 1</td>
<td>Applied Entomology</td>
<td>3.0</td>
</tr>
<tr>
<td>CRP S 2</td>
<td>Forage Crops</td>
<td>3.0</td>
<td>SOILS 1</td>
<td>Intro Soils Science</td>
<td>3.0</td>
</tr>
<tr>
<td>CRP S 3</td>
<td>Row Crops</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN S 1</td>
<td>Interm Animal Sci</td>
<td>3.0</td>
<td>MC AG 3</td>
<td>Tractor Serv/Oper</td>
<td>3.0</td>
</tr>
<tr>
<td>HORT 1</td>
<td>Prin Fruit Growing</td>
<td>3.0</td>
<td>MC AG 5</td>
<td>Farm Power</td>
<td>2.0</td>
</tr>
<tr>
<td>MC AG 2</td>
<td>Beginning Mech Ag</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FORESTRY

The program provides a broad general experience in the arts and science 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 pre-forestry, resource conservation and wildlife management program at Bakersfield College 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>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRIC 10</td>
<td>Intro Calif Agric</td>
<td>3.0</td>
<td>FORES 3</td>
<td>Wildlife Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRIC 49</td>
<td>Ag Leadership Trng</td>
<td>2.0</td>
<td>FORES 5</td>
<td>Idnt Calif Wildlife</td>
<td>3.0</td>
</tr>
<tr>
<td>FORES 1</td>
<td>Intro to Forestry</td>
<td>3.0</td>
<td>SOILS 1</td>
<td>Intro Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>FORES 2</td>
<td>Natural Resources</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG BS 4</td>
<td>Oper Use Ag Comptrs</td>
<td>3.0</td>
<td>FORES 4</td>
<td>Wildlife Law Enforc</td>
<td>3.0</td>
</tr>
<tr>
<td>AN S 1</td>
<td>Interm Animal Sci</td>
<td>3.0</td>
<td>MC AG 9</td>
<td>Sm Eng/Equip Repair</td>
<td>2.0</td>
</tr>
<tr>
<td>AN S 6</td>
<td>Appl Animal Nutritn</td>
<td>3.0</td>
<td>ORNH 6</td>
<td>Orn Plt Id/Grd Cov</td>
<td>3.0</td>
</tr>
<tr>
<td>ENTM 1</td>
<td>Applied Entomology</td>
<td>3.0</td>
<td></td>
<td></td>
<td></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>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRIC 10</td>
<td>Intro Calif Agric</td>
<td>3.0</td>
<td>ENTM 1</td>
<td>Applied Entomology</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRIC 49</td>
<td>Ag Leadership Trng</td>
<td>2.0</td>
<td>ORNH 6</td>
<td>Orn Plt Id/Grd Cov</td>
<td>3.0</td>
</tr>
<tr>
<td>AG BS 5</td>
<td>Agricultural Market</td>
<td>3.0</td>
<td>SOILS 1</td>
<td>Intro Soil Science</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG BS 2</td>
<td>Agricultural Econ</td>
<td>3.0</td>
<td>MC AG 3</td>
<td>Tractor Serv/Oper</td>
<td>3.0</td>
</tr>
<tr>
<td>AG BS 3</td>
<td>Farm Accounting</td>
<td>3.0</td>
<td>MC AG 5</td>
<td>Farm Power</td>
<td>2.0</td>
</tr>
<tr>
<td>AG BS 4</td>
<td>Oper Use at Comptrs</td>
<td>3.0</td>
<td>ORNH 4</td>
<td>Plant Propagation</td>
<td>3.0</td>
</tr>
<tr>
<td>MC AG 2</td>
<td>Beginning Mech Ag</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MECHANIZED AGRICULTURE

This program prepares the student for occupations in agriculture production, harvesting, processing, and machinery fabrication and repair. This program also provides a foundation for transfer to a four-year college.

Minimum units required in discipline – 14.5

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRIC 10</td>
<td>Intro Calif Agric</td>
<td>3.0</td>
<td>MC AG 8</td>
<td>Power Transmission</td>
<td>3.0</td>
</tr>
<tr>
<td>MC AG 49</td>
<td>Ag Leadership Trng</td>
<td>2.0</td>
<td>MC AG 5</td>
<td>Farm Power</td>
<td>2.0</td>
</tr>
<tr>
<td>MC AG 2</td>
<td>Beginning Mech Ag</td>
<td>3.0</td>
<td>MC AG 59a</td>
<td>Beg Eng/Equip Rep</td>
<td>1.5</td>
</tr>
<tr>
<td>MC AG 3</td>
<td>Tractor Serv/Oper</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG BS 3</td>
<td>Farm Accounting</td>
<td>3.0</td>
<td>FORES 1</td>
<td>Intro to Forestry</td>
<td>3.0</td>
</tr>
<tr>
<td>AG BS 4</td>
<td>Oper Use Ag Comptrs</td>
<td>3.0</td>
<td>HORT 1</td>
<td>Prin Fruit Growing</td>
<td>3.0</td>
</tr>
<tr>
<td>AN S 1</td>
<td>Interim Animal Sci</td>
<td>3.0</td>
<td>ORN H 6</td>
<td>Orn Plt Id/Grd Cov</td>
<td>3.0</td>
</tr>
<tr>
<td>CRP S 2</td>
<td>Forage Crops</td>
<td>3.0</td>
<td>ORN H 9</td>
<td>Land Contract/Maint</td>
<td>3.0</td>
</tr>
<tr>
<td>CRP S 5</td>
<td>Weed Control</td>
<td>3.0</td>
<td>SOILS 1</td>
<td>Intro Soil Science</td>
<td>3.0</td>
</tr>
</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.

Minimum units required in discipline – 21

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRIC 10</td>
<td>Intro Calif Agric</td>
<td>3.0</td>
<td>ORN H 5</td>
<td>Nursery Management</td>
<td>3.0</td>
</tr>
<tr>
<td>ORN H 2</td>
<td>Fund Nur Mgt/Pl Pro</td>
<td>3.0</td>
<td>ORN H 6</td>
<td>Orn Plt Id/Lrg Shrb</td>
<td>3.0</td>
</tr>
<tr>
<td>ORN H 3</td>
<td>Land Install/Maint</td>
<td>3.0</td>
<td>ORN H 7</td>
<td>Orn Plt Id/Lrg Shrb</td>
<td>3.0</td>
</tr>
<tr>
<td>ORN H 4</td>
<td>Plant Propagation</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG BS 2</td>
<td>Agricultural Econ</td>
<td>3.0</td>
<td>MC AG 2</td>
<td>Beginning Mech Ag</td>
<td>3.0</td>
</tr>
<tr>
<td>AG BS 4</td>
<td>Oper Use Ag Comptrs</td>
<td>3.0</td>
<td>MC AG 59a</td>
<td>Beg Eng/Equip Rep</td>
<td>1.5</td>
</tr>
<tr>
<td>AG BS 5</td>
<td>Agricultural Market</td>
<td>3.0</td>
<td>SOILS 1</td>
<td>Intro Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>ENTM 1</td>
<td>Applied Entomology</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**PRE-VETERINARY MEDICINE**

The veterinarian diagnoses 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, sales or promotion of commercial products, or provide technical services for commercial firms.

### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN S 1</td>
<td>Interm Animal Sci</td>
<td>3.0</td>
<td>CHEM 8</td>
<td>Organic Chemistry</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL 1a</td>
<td>Prin Animal Biology</td>
<td>4.0</td>
<td>CHEM 9</td>
<td>Organic Chem Lab</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL 1c</td>
<td>Prin Cellular Biol</td>
<td>4.0</td>
<td>ENGL 1a</td>
<td>Expository Composit</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM 1a</td>
<td>General Chemistry</td>
<td>5.0</td>
<td>PHYSC 2a</td>
<td>Gen Mech/Heat</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM 1b</td>
<td>Gen Chem/Chem Anal</td>
<td>5.0</td>
<td>PHYSC 2b</td>
<td>Gen SLEMMP</td>
<td>4.0</td>
</tr>
</tbody>
</table>

### Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN S 6</td>
<td>Appl Animal Nutritn</td>
<td>3.0</td>
<td>SPCH</td>
<td>Approved Course</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL</td>
<td>Approved Course</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ASSOCIATE IN SCIENCE DEGREE PROGRAMS**

**AGRICULTURAL BUSINESS MANAGEMENT**

Minimum units required in discipline – 32

### Suggested Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRIC 10</td>
<td>Intro Calif Agric</td>
<td>3.0</td>
<td>AN S 7</td>
<td>Livestock Diseases</td>
<td>3.0</td>
</tr>
<tr>
<td>AG BS 2</td>
<td>Agricultural Econ</td>
<td>3.0</td>
<td>ORN H 6</td>
<td>Orn Plt Id/Grd Cov</td>
<td>3.0</td>
</tr>
<tr>
<td>AG BS 3</td>
<td>Farm Accounting</td>
<td>3.0</td>
<td>CRP S 2</td>
<td>Forage Crops</td>
<td>3.0</td>
</tr>
<tr>
<td>AG BS 5</td>
<td>Agricultural Market</td>
<td>3.0</td>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGRIC 49</td>
<td>Ag Leadership Trng</td>
<td>2.0</td>
<td>HORT 1</td>
<td>Prin Fruit Growing</td>
<td>3.0</td>
</tr>
<tr>
<td>SOILS 1</td>
<td>Intro Soil Science</td>
<td>3.0</td>
<td>CRP S 4</td>
<td>Vegetable Productn</td>
<td>3.0</td>
</tr>
<tr>
<td>AN S 1</td>
<td>Interm Animal Sci</td>
<td>3.0</td>
<td>ENTM 1</td>
<td>Applied Entomology</td>
<td>3.0</td>
</tr>
<tr>
<td>AN S 6</td>
<td>Appl Animal Nutritn</td>
<td>3.0</td>
<td>MC AG 5</td>
<td>Farm Power</td>
<td>3.0</td>
</tr>
</tbody>
</table>
# ANIMAL SCIENCE

Minimum units required in discipline – 32

## Suggested Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>UN</th>
<th>Course Code</th>
<th>Course Name</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN S 1</td>
<td>Interm Animal Sci</td>
<td>3.0</td>
<td>AG BS 2</td>
<td>Agricultural Econ</td>
<td>3.0</td>
</tr>
<tr>
<td>AN S 2</td>
<td>Beef Production</td>
<td>3.0</td>
<td>AG BS 3</td>
<td>Farm Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>AN S 3</td>
<td>Sheep Production</td>
<td>3.0</td>
<td>AG BS 5</td>
<td>Agricultural Market</td>
<td>3.0</td>
</tr>
<tr>
<td>AN S 6</td>
<td>Appl Animal Nutritn</td>
<td>3.0</td>
<td>ENTM 1</td>
<td>Applied Entomology</td>
<td>3.0</td>
</tr>
<tr>
<td>AN S 7</td>
<td>Livestock Disease</td>
<td>3.0</td>
<td>MC AG 2</td>
<td>Beginning Mech Ag</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRIC 10</td>
<td>Intro Calif Agric</td>
<td>3.0</td>
<td>SOILS 1</td>
<td>Intro Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRIC 49</td>
<td>Ag Leadership Trng</td>
<td>2.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

# CROP SCIENCE

Minimum units required in discipline – 32

## Suggested Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>UN</th>
<th>Course Code</th>
<th>Course Name</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRIC 10</td>
<td>Intro Calif Agric</td>
<td>3.0</td>
<td>CRP S 4</td>
<td>Vegetable Product</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRIC 49</td>
<td>Ag Leadership Trng</td>
<td>2.0</td>
<td>ENTM 1</td>
<td>Applied Entomology</td>
<td>3.0</td>
</tr>
<tr>
<td>AG BS 2</td>
<td>Agricultural Econ</td>
<td>3.0</td>
<td>HORT 1</td>
<td>Prin Fruit Growing</td>
<td>3.0</td>
</tr>
<tr>
<td>AG BS 3</td>
<td>Farm Accounting</td>
<td>3.0</td>
<td>MC AG 3</td>
<td>Tractor Serv/Oper</td>
<td>3.0</td>
</tr>
<tr>
<td>AG BS 4</td>
<td>Oper Use Ag Cmptrs</td>
<td>3.0</td>
<td>MC AG 5</td>
<td>Farm Power</td>
<td>2.0</td>
</tr>
<tr>
<td>CRP S 2</td>
<td>Forage Crops</td>
<td>3.0</td>
<td>SOILS 1</td>
<td>Intro Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>CRP S 3</td>
<td>Row Crops</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

# FORESTRY

Minimum units required in discipline – 32

## Suggested Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>UN</th>
<th>Course Code</th>
<th>Course Name</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRIC 10</td>
<td>Intro Calif Agric</td>
<td>3.0</td>
<td>FORES 2</td>
<td>Natural Resources</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRIC 49</td>
<td>Ag Leadership Trng</td>
<td>2.0</td>
<td>FORES 3</td>
<td>Wildlife Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AG BS 2</td>
<td>Agricultural Econ</td>
<td>3.0</td>
<td>FORES 5</td>
<td>Idnt Calif Wildlife</td>
<td>3.0</td>
</tr>
<tr>
<td>AG BS 3</td>
<td>Farm Accounting</td>
<td>3.0</td>
<td>MC AG 2</td>
<td>Beginning Mech Ag</td>
<td>3.0</td>
</tr>
<tr>
<td>AN S 6</td>
<td>Appl Animal Nutritn</td>
<td>3.0</td>
<td>NRM 1</td>
<td>Range Management</td>
<td>3.0</td>
</tr>
<tr>
<td>ENTM 1</td>
<td>Applied Entomology</td>
<td>3.0</td>
<td>ORN H 7</td>
<td>Orn Plt Id/Lrg Shrb</td>
<td>3.0</td>
</tr>
<tr>
<td>FORES 1</td>
<td>Intro to Forestry</td>
<td>3.0</td>
<td>SOILS 1</td>
<td>Intro Soil Science</td>
<td>3.0</td>
</tr>
</tbody>
</table>
MECHANIZED AGRICULTURE

Minimum units required in discipline – 32

Suggested Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>UN</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRIC 10</td>
<td>Intro Calif Agric</td>
<td>3.0</td>
<td>MC AG 5</td>
<td>Farm Power</td>
<td>2.0</td>
</tr>
<tr>
<td>AGRIC 49</td>
<td>Ag Leadership Trng</td>
<td>2.0</td>
<td>MC AG 8</td>
<td>Power Transmission</td>
<td>2.0</td>
</tr>
<tr>
<td>AG BS 4</td>
<td>Oper Use Ag Cmptrs</td>
<td>3.0</td>
<td>MC AG 59a</td>
<td>Sm Eng/Equip Repair</td>
<td>2.0</td>
</tr>
<tr>
<td>AN S 1</td>
<td>Interim Animal Sci</td>
<td>3.0</td>
<td>ORN H 3</td>
<td>Land Install/Maint</td>
<td>3.0</td>
</tr>
<tr>
<td>FORES 1</td>
<td>Intro to Forestry</td>
<td>3.0</td>
<td>SOILS 1</td>
<td>Intro Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>HORT 1</td>
<td>Prin Fruit Growing</td>
<td>3.0</td>
<td>CRP S 1</td>
<td>Prin Crop Productn</td>
<td>3.0</td>
</tr>
<tr>
<td>MC AG 2</td>
<td>Beginning Mech Ag</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ORNAMENTAL HORTICULTURE

Minimum units required in discipline – 32

Suggested Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>UN</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRIC 10</td>
<td>Intro Calif Agric</td>
<td>3.0</td>
<td>ORN H 3</td>
<td>Land Install/Maint</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRIC 49</td>
<td>Ag Leadership Trng</td>
<td>2.0</td>
<td>ORN H 6</td>
<td>Orn Plt Id/Grd Cov</td>
<td>3.0</td>
</tr>
<tr>
<td>AG BS 3</td>
<td>Farm Accounting</td>
<td>3.0</td>
<td>ORN H 7</td>
<td>Orn Plt Id/Lrg Shrb</td>
<td>3.0</td>
</tr>
<tr>
<td>AG BS 4</td>
<td>Oper Use Ag Cmptrs</td>
<td>3.0</td>
<td>MC AG 3</td>
<td>Tractor Serv/Oper</td>
<td>3.0</td>
</tr>
<tr>
<td>AG BS 5</td>
<td>Agricultural Market</td>
<td>3.0</td>
<td>MC AG 59a</td>
<td>Sm Eng/Equip Repair</td>
<td>2.0</td>
</tr>
<tr>
<td>ENTM 1</td>
<td>Applied Entomology</td>
<td>3.0</td>
<td>SOILS 1</td>
<td>Intro Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>ORN H 2</td>
<td>Fund Nur Mgt/Pl Pro</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: lect lecture; lab laboratory; demo demonstration; Repeat repeatability; CCS Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. NOTE: If repeatability is not shown, course may not be repeated.

AGRICULTURAL BUSINESS MANAGEMENT

AG BS 2 AGRICULTURAL ECONOMICS (3 units)
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. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Occupational Education Transferable: CSU and Private Colleges.
AG BS 3  FARM ACCOUNTING (3 units)
Farm accounting systems, farm records, budgets, income tax returns, reorganization of actual farms. An introduction to computers and reading computer printouts. Prerequisite: Reading Level 1. AG BS 2 or ECON 1 recommended. Hours: (81) 3 lect, 1½ computer lab. CCS: Occupational Education Transferable: CSU and Private Colleges.

AG BS 4  OPERATIONAL USE OF AGRICULTURAL COMPUTERS (3 units)
Operation of computer systems/equipment and execution of an agricultural program. Emphasizes use of personal computers in agriculture. Prerequisite: Reading Level 1. Hours: (81) 3 lect, 1½ computer lab. CCS: Occupational Education. Transferable: CSU and Private Colleges.

AG BS 5  AGRICULTURAL MARKETING (3 units)
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, information location, production, business with banks, labor and government—emphasis on California farm related industries. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Occupational Education. Transferable: CSU and Private Colleges.

AG BS 6  INTRODUCTION TO COMPUTER APPLICATION IN AGRICULTURE (3 units)
Use of library programs available for Agriculture programs written in BASIC programming language. Operation of the main systems Digital 1170 and operation of personal computers. Prerequisite: Reading Level 1. Hours: (81) 3 lect, 1½ computer lab. CCS: Occupational Education. Transferable: CSU and Private Colleges.

AG BS 54a OPERATIONAL USE OF AGRICULTURAL MICROCOMPUTER (1.5 units)
Operation of microcomputer systems/equipment and execution of an agricultural program. Emphasizes use of personal microcomputers in agriculture. Prerequisite: None. Hours: (40.5) 3 lect, 1½ computer lab for 9 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.

AG BS 54b OPERATIONAL USE OF AGRICULTURAL SOFTWARE (1.5 units)
Operation of Academic Computer System/equipment at Bakersfield College and execution of an agricultural program. Emphasizes the use of Academic Computer. Prerequisite: None. Hours: (40.5) 3 lect, 1½ computer lab for 9 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Formerly AG BS 52.
AGRICULTURE

AGRIC 2  AGRICULTURAL MATHEMATICS (3 units)
An elementary course dealing with mathematical problems encountered in the work-a-day operations in agriculture. Emphasizes the types of mathematical problem solving found in Animal Science, Crop Science, Forestry, Mechanized Agriculture, and Ornamental Horticulture. Presents mathematical topics, including algebra and geometry, to provide exposure of agricultural disciplines to topics. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

AGRIC 10  INTRODUCTION TO CALIFORNIA AGRICULTURE (3 units)
Survey of the agriculture industry in California. Topics include career, job requirements, agriculture terminology, employment opportunities and an orientation to the college curriculum. Satisfies 0.5 unit counseling requirement for graduation from Bakersfield College. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

AGRIC 11  AGRICULTURE EMPLOYMENT SEMINAR (1 unit)
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, assists in the development of knowledge, attitudes, skills and judgment essential to succeed in the world of work. **Prerequisite:** Reading Level 1. **Hours:** (18) 1 lect. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

AGRIC 12  AGRICULTURAL COOPERATIVE WORK EXPERIENCE EDUCATION (1–3 units. Limit 6 units.)
Program which coordinates on-the-job learning with collegiate curriculum. Open to Agriculture majors only. On-the-job experience must be related to student's career objectives. Number of units earned depends upon the number of hours worked per semester. **Prerequisite:** AGRIC 11 (may be taken concurrently). **Hours:** 5 hours of work per week equals one unit. **Repeat:** 1, or until a limit of 6 units is reached. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

AGRIC 49  AGRICULTURE LEADERSHIP TRAINING (2 units)
Supervised field work related to lecture instruction including agricultural competitions; judging contests; livestock shows; recruiting programs; and youth activity planning, preparation and execution. **Prerequisite:** Reading Level 1 or evaluation by counselor/advisor. **Hours:** (72) 1 lect, 3 lab. Field trips required. **Repeat:** 2. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.
AGRIC 59a—59b  PRACTICAL SPANISH FOR AGRICULTURE (2—2 units)
Introduces students to the vocabulary and idiom in current use among Spanish speakers of the San Joaquin Valley agricultural region. While grammatical concepts are presented, the primary goal is development of listening and speaking skills, along with acquisition of appropriate cultural concepts. Prerequisites: 59a — none. 59b — SPAN 59a. One year of high school Spanish recommended. Hours: (54—54) 3 lect. Repeat: 1. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Not open to students with credit in SPAN 59a and 59b.

AGRIC 90 FARM TRACTOR
MECHANIC-TECHNICIAN TRAINING (20 units)
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. Prerequisite: None. Hours: (1,080) 10 lect and 20 lab for approx. 36 weeks. Open entry/open exit. CCS: Occupational Education. Not Transferable: Associate Degree only.

AGRIC 249  COOPERATIVE WORK EXPERIENCE
EDUCATION (1—4 units. Limit 16 units.)
College credit for learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Prerequisites: Declared vocational major; concurrent enrollment in seven or more units (including CWEE units, except summer school); minimum 2.00 GPA; or evaluation by instructor. Hours: (75 per semester per credit unit at a paid job, or 60 per semester unit at a non-paid job). 5 or more per week. Repeat: 3 or until a limit of 16 units is reached. CCS: Occupational Education. Transferable: CSU and Private Colleges. Credit limitations. For specific information see counselor. Note: Formerly AGRIC 11 and AGRIC 12.

ANIMAL SCIENCE

AN S 1 INTERMEDIATE ANIMAL SCIENCE (3 units)
Scientific and practical aspects of meat animals, horse and dairy cattle, care and management. Nutrition, breeding selection, anatomy and physiology, slaughtering, processing and marketing will be stressed. Prerequisite: Reading Level 1. Hours: (90) 2 lect, 3 lab. Field trips required. CCS: Occupational Education. Transferable: UC, CSU and Private Colleges.

AN S 2  BEEF PRODUCTION (3 units)
Commercial and purebred beef cattle production in the United States. History and development of the beef cattle industry. Beef breeding, genetics, breeding, production costs, marketing and herd management. Prerequisite: Reading Level 1. Hours: (90) 2 lect, 3 lab. Field trips required. CCS: Occupational Education. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.
AN S 3 SHEEP PRODUCTION (3 units)
Sheep production in the United States, California and Kern County. Emphasizes breeds, breeding, lambing, selection, feeding, shearing, and marketing of lamb and wool including commercial production of market lambs in Kern County. Prerequisite: Reading Level 1. Hours: (90) 2 lect, 3 lab. Field trips required. CCS: Occupational Education. Transferable: CSU and Private Colleges.

AN S 6 APPLIED ANIMAL NUTRITION (3 units)
Fundamentals of feeding livestock. Includes constituents of feeds, feed nutrients, digestive system of farm animals and their utilization of various feeds and balancing daily rations for farm animals. Prerequisite: Reading Level 1. MATH A. Hours: (54) 3 lect. Field trips required. CCS: Occupational Education. Transferable: UC, CSU and Private Colleges.

AN S 7 LIVESTOCK DISEASES (3 units)
Livestock hygiene and sanitation. Emphasizes the cause, symptoms and prevention of common livestock diseases, external and internal parasites. Safe use of disease preventatives and treatments is stressed. Prerequisite: Reading Level 1. Hours: (54) 3 lect. Field trips required. CCS: Occupational Education. Transferable: CSU and Private Colleges.

AN S 8 JUDGING (2 units)
A beginning course in judging market and breeding classes of dairy beef, sheep and swine. Prerequisite: AN S 1. Hours: (72) 1 lect, 3 lab and/or selected field trips. CCS: Occupational Education. Transferable: CSU and Private Colleges.

AN S 10 HORSE PRODUCTION (3 units)
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. Prerequisite: Reading Level 1. Hours: (54) 3 lect. Field trip required. CCS: Occupational Education. Transferable: CSU and Private Colleges.

AN S 11 ADVANCED HORSE PRODUCTION (3 units)
Management of breeding and training stable, nutrition, health, training and transportation of horses. Prerequisite: AN S 10. Hours: (54) 3 lect. One Saturday field trip required. CCS: Occupational Education. Transferable: CSU and Private Colleges.

AN S 45 ANATOMY AND PHYSIOLOGY OF FARM ANIMALS (3 units)
An introductory course in anatomy and physiology of horses, cattle, swine, sheep and poultry. Prerequisite: Reading Level 1. Hours: (54) 3 lect. One Saturday field trip required. CCS: Occupational Education. Transferable: CSU and Private Colleges.

AN S 71 DISEASES OF BEEF AND DAIRY CATTLE (1 unit)
The causes, symptoms, prevention and recommended treatment of the common disease problems in beef and dairy cattle in Kern County. Prerequisite: None. Hours: (18) 2 lect for 9 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.
AN S 72  DISEASES OF HORSES (1 unit)
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. **Prerequisite:** None. **Hours:** (18) 2 lect. for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

AN S 74  EQUINE NUTRITION (1 unit)
A series of lectures covering the various phases of horse nutrition. An evening class designed for the adult horse owner or trainer. **Prerequisite:** None. **Hours:** (18) 2 lect for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

AN S 79  SMALL SCALE LIVESTOCK PRODUCTION (3 units)
A study of selecting, handling, breeding, housing, managing, and marketing of small herds of livestock and flocks of poultry. **Prerequisite:** Reading Level 2. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CROP SCIENCE

CRP S 1  PRINCIPLES OF CROP PRODUCTION (3 units)
Presents 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. **Prerequisite:** Reading Level 1. **Hours:** (90) 2 lecture, 3 lab and/or selected field trips. One Saturday field trip required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

CRP S 2  FORAGE CROPS (3 units)
A study of the common forage crops: alfalfa, common pasture grasses and legumes. Varieties, adaptations, methods of handling and processing. Seeding and seed bed preparation. **Prerequisite:** Reading Level 1. **Hours:** (90) 2 lect, 3 lab and/or selected field trips. One Saturday field trip required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

CRP S 3  ROW CROPS (3 units)
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. Emphasizes cotton production and marketing in Kern County. **Prerequisite:** Reading Level 1. **Hours:** (90) 2 lect, 3 lab and/or selected field trips. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.
CRP S 4  VEGETABLE PRODUCTION (3 units)
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. **Prerequisite:** Reading Level 1.  
**Hours:** (90) 2 lect, 3 lab and/or selected field trips. **CCS:** Occupational Education. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

CRP S 5  WEED CONTROL (3 units)
Introduces weeds common to the area and the various types of control, weed control chemicals and equipment for cultivated crops. **Prerequisite:** Reading Level 1.  
**Hours:** (90) 2 lect, 3 lab and field trips by arrangement. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

CRP S 58  ORGANIC GARDENING (2 units)
Presents 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. **Prerequisite:** Reading Level 1.  
**Hours:** (72) 1 lect, 3 lab by arrangement. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CRP S 59  BEEKEEPING (2 units)
Presents the fundamental skills of beekeeping such as handling bee colonies, collecting and separating honey, and constructing hives. Includes the basic principles of queen selection and care, crop pollination practices, honey processing and marketing, and disease detection. **Prerequisite:** Reading Level 1.  
**Hours:** (72) 1 lect, 3 lab and field trips by arrangement. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CRP S 62  SMALL PLOT FARMING (3 units)
Designed for students interested in plant propagation and the care and use of plant materials in small plot farming. Includes cultivation, fertilization, irrigation, harvesting practices, pest control, soil problems and planting dates. **Prerequisite:** Reading Level 2.  
**Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CRP S 200  GENERAL CROP SKILLS (8 units)
An initial course in the Crop Science 2 + 2 Vocational Certificate Program. Emphasizes skills used on crop farms in Kern County will be emphasized. **Prerequisite:** None.  
**Hours:** (234) 5 lect, 8 lab and/or selected field trips. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CRP S 300  APPLIED CROP PRODUCTION SKILLS (8 units)
A required course for students in Crop Science 2 + 2 Vocational Certificate Program. Develops the skills required to grow crops in Kern County. **Prerequisite:** CRP S 200 or evaluation by instructor.  
**Hours:** (234) 4 lect, 8 lab and/or selected field trips. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
ENTOMOLOGY

ENTM 1 APPLIED ENTOMOLOGY (3 units)
An introduction to the classification, life history, morphology, physiology and ecology of insects, insecticides and their applications. **Prerequisite:** Reading Level 1. **Hours:** (90) 2 lect, 3 lab and/or selected field trips. **CCS:** Occupational Education. **Transferable:** UC, CSU and Private Colleges.

FORESTRY

FORES 1 INTRODUCTION TO FORESTRY (3 units)
Problems in forestry and forestry management. Includes study of forest diseases and insect problems. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect and/or related field trips. **CCS:** Occupational Education. **Transferable:** UC, CSU and Private Colleges.

FORES 2 NATURAL RESOURCES (3 units)
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. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect and/or related field trips. **CCS:** Occupational Education. **Transferable:** UC, CSU and Private Colleges.

FORES 3 WILDLIFE MANAGEMENT (3 units)
Foundations of wildlife production. The identification, life histories and ecology of important wildlife species — fur bearers, water fowl and fish. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

FORES 4 WILDLIFE LAW ENFORCEMENT (3 units)
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. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

FORES 5 IDENTIFICATION OF CALIFORNIA WILDLIFE (3 units)
A survey of game birds, fish and mammals of California and the Western United States. Characteristics of game animals and protected species. Practices identifying animals in their environment. Emphasizes protecting species which are in danger of extinction. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** UC, CSU and Private Colleges.

FORES 7 WILDLAND FIRE MANAGEMENT (3 units)
Covers 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. **Prerequisite:** FORES 1 or 2 (may be taken concurrently.) **Hours:** (54) 3 lect and/or 1 Saturday field trip. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.
HORTICULTURE

HORT 1 PRINCIPLES OF FRUIT GROWING (3 units)
A survey of the fruit growing industry including climatic influences, cultural practices and varieties. **Prerequisite:** Reading Level 1. **Hours:** (90) 2 lect, 3 lab and/or selected field trips. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

HORT 51 MASTER GARDENER (3 units)
Advanced techniques of horticulture and plant propagation, including vegetables, turf and ornamentals, grapes and subtropical fruits, deciduous fruits, nuts and soils. Topics will include soil preparation, planting, fertilization, pruning practices, insect control, weed control, irrigation and harvest. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **Repeat:** 3. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MECHANIZED AGRICULTURE

MC AG 2 BEGINNING MECHANIZED AGRICULTURE (3 units)
An introduction to the field of Mechanized Agriculture including familiarization with the theory and application of basic skills commonly used. **Prerequisite:** Reading Level 1. **Hours:** (90) 2 lect, 3 lab and/or selected field trips. **CCS:** Occupational Education. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

MC AG 3 TRACTOR SERVICE AND OPERATION (3 units)
An introduction to tractor service and operation including familiarization with the theory and operation of farm tractors and their various systems including two-wheel drive, four-wheel drive, crawlers, skiploaders and forklifts. **Prerequisite:** MC AG 2 or evaluation by instructor. **Hours:** (90) 2 lect, 3 lab and/or selected field trips. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

MC AG 5 FARM POWER (2 units)
A study of the major types of power used on modern farms and ranches, including electricity, internal combustion engines, wind energy and co-generation. **Prerequisite:** Reading Level 1. **Hours:** (72) 1 lect, 3 lab and/or selected field trips. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

MC AG 8 POWER TRANSMISSIONS (2 units)
A study of mechanical and hydraulic power shift transmissions and related components within agricultural and construction machinery. **Prerequisite:** MC AG 7 or evaluation by instructor. **Hours:** (72) 2 lect, 2 lab and/or selected field trips. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

MC AG 59a BEGINNING SMALL ENGINE AND EQUIPMENT REPAIR (1.5 units)
Designed for shop mechanics, machinery operators, gardeners, landscapers and students in agriculture. Covers the theory of operation of turn equipment small agriculture equipment and engines, including chainsaws, spray equipment, pumps, all terrain vehicles and small tractors. **Prerequisite:** None. **Hours:** (54) 1 lect, 2 lab. **Repeat:** 2. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
MC AG 59b  BEGINNING SMALL ENGINE AND EQUIPMENT REPAIR (1.5 units)
A continuation of MC AG 59a designed for shop mechanics, machinery operators, gardeners, landscapers and students in agriculture. Covers the theory of operation of turn equipment, small agriculture equipment and engines, including chainsaws, spray equipment, pumps, all terrain vehicles and small tractors. Prerequisite: None. Hours: (54) 1 lect, 2 lab. Repeat: 2. CCS: Occupational Education. Not Transferable: Associate Degree only.

MC AG 90  MECHANIZED AGRICULTURE EMPLOYMENT SKILLS (3 units)
An upgrade of general education skills, with emphasis on human relations and job search skills, related to agriculture. Prerequisite: Eighth grade reading and math level; concurrent enrollment in AG 90. Hours: (144) 8 lect, open entry/open exit. CCS: Occupational Education. Not Transferable: Associate Degree only.

MC AG 92  FORKLIFT OPERATION (2 units)
Designed to teach students how to operate a lift truck in the manner it is used in agriculture and industry in Kern County. Prerequisite: Class III California Driver’s License. Hours: (80) 20 lect, 20 lab. Repeat: 1. CCS: Occupational Education. Not Transferable: Associate Degree only.

MC AG 93  HEAVY TRUCK OPERATION & SAFETY (2 units)
Designed to teach students how to operate heavy duty trucks under highway and field conditions. The successful completion of this course is obtaining a Class I California Driver’s License. Prerequisite: Valid Class III California Driver’s License. A clean (no more than two moving violations) DMV report. Must pass the California Class I physical examination. Hours: (80) 10 lect, 30 lab. Repeat: 1. CCS: Occupational Education. Not Transferable: Associate Degree only.

MC AG 200  BEGINNING MECHANIZED AGRICULTURE (8 units)
The initial course in the Mechanized Agriculture 2 + 2 Vocational Certificate Program. Includes MC AG 1, MC AG 2, plus an additional five hours laboratory. Prerequisite: None. Hours: (234) 5 lect, 8 lab and/or selected field trips. CCS: Occupational Education. Not Transferable: Associate Degree only.

MC AG 300  TRACTOR SERVICE AND OPERATION (8 units)
Designed to teach operating and servicing of tractors. Includes MC AG 3, AGRIC 2, plus an additional five hours laboratory. Upon completion, a Certificate of Competency in Tractor Service and Operation will be awarded. Prerequisite: MC AG 200 or evaluation by instructor. Hours: (234) 5 lect, 8 lab and/or selected field trips. CCS: Occupational Education. Not Transferable: Associate Degree only.
NATURAL RESOURCES MANAGEMENT

NRM 1 RANGE MANAGEMENT (3 units)
Basic management and improvement practices required for successful utilization of rangeland resources. Emphasizes maintenance and improvement of proper range plant communities for each range region. **Prerequisite:** Reading Level 1. **Hours:** (90) 2 lect, 3 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

ORNAMENTAL HORTICULTURE

ORN H 2 FUNDAMENTALS OF NURSERY MANAGEMENT AND PLANT PRODUCTION (3 units)
Commercial nursery operations. Propagation, propagation medias, nursery designs, propagation structures, seedage, cuttage, plant structure, rooting aids, transplanting, stepping up, and potting. Principles of sexual and asexual propagation. **Prerequisite:** Reading Level 1. **Hours:** (90) 2 lect, 3 lab and/or selected field trips: (a) local nurseries, (b) Monrovia Nursery. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

ORN H 3 LANDSCAPE INSTALLATION AND MAINTENANCE (3 units)
Covers the planning, installation and maintenance of landscapes in Kern County and California. **Prerequisite:** Reading Level 1. **Hours:** (90) 2 lect, 3 lab and/or selected field trips: (a) local nurseries, (b) Kern County Parks, (c) CSU Fresno, (d) Los Angeles County Arboretum. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

ORN H 4 PLANT PROPAGATION (3 units)
Principles of sexual propagation (seedage) and asexual propagation (budding, grafting, cutting, layering, division and separation). **Prerequisite:** Reading Level 1. **Hours:** (90) 2 lect, 3 lab and/or selected field trips: (a) local nurseries, (b) Monrovia Nursery, (c) Rogers Gardens, (d) Tenaya Garden Center. **CCS:** Occupational Education. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ORN H 5 NURSERY MANAGEMENT (3 units)
Commercial nursery operations. Propagation, propagation medias, nursery designs, propagation structures, seedage, cuttage, plant structure, rooting aids, transplanting, stepping up, potting, greenhouse plants, ground covers, shrubs and trees. **Prerequisite:** Reading Level 1. **Hours:** (90) 2 lect, 3 lab and/or selected field trips: a) local nurseries, (b) Monrovia Nursery, (c) Hines Nursery, (d) Gallup and Stribling International, (e) Tenaya Garden Center. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.
ORN H 6  ORNAMENTAL PLANT IDENTIFICATION – GROUND COVERS, VINES, AND DWARF SHRUBS (3 units)
Identification, habits of growth, culture and landscape use of dwarf shrubs, vines, ground covers, annuals, and biennials, adapted to the Central Valley of California. Prerequisite: Reading Level 1. Hours: (90) 2 lect, 3 lab and/or selected field trips: (a) local nurseries, (b) Los Angeles County Arboretum, (c) Huntington Botanical Gardens. CCS: Occupational Education. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ORN H 7  ORNAMENTAL PLANT IDENTIFICATION – LARGE SHRUBS, SMALL TREES, LARGE TREES AND PALMS (3 units)
Identification, habits of growth, culture and landscape use of large shrubs, small trees, large trees and palms adapted to the Central Valley of California. Prerequisite: ORN H 6 or evaluation by instructor. Hours: (90) 2 lect, 3 lab and/or selected field trips: (a) local nurseries, (b) Los Angeles County Arboretum, (c) Huntington Botanical Gardens. CCS: Occupational Education. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ORN H 35a  ORNAMENTAL HORTICULTURE (1 unit)
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 (seedage) and asexual propagation (cuttings, layering, divisions, and separation) of common house and landscaping plants. Prerequisite: Reading Level 1. Hours: (18) 18 lect. CCS: Occupational Education. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ORN H 41  INTERIOR PLANTSCAPE AND FLORAL DESIGN (2 units)
The conditioning and use of plants, flowers, and related materials in making arrangements; a study of the basic principles of design in relation to the use of flowers and plants; typical seasonal arrangement; the planting of decorative indoor and adjacent outdoor planters. Prerequisite: Reading Level 1. Hours: (54) 1 lect, 2 lab. Field trips required. CCS: Occupational Education. Transferable: CSU and Private Colleges.

ORN H 70  TURF MANAGEMENT (2 units)
Practice in turf construction, maintenance and management including golf greens, athletic fields and park lawns. Prerequisite: None. Hours: (54) 1 lect, 1 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

ORN H 75a  PLANT MAINTENANCE AND IDENTIFICATION (1.5 units)
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. Prerequisite: None. Hours: (27) 3 lect for 9 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.
ORN H 75b  PLANT MAINTENANCE AND IDENTIFICATION (1.5 units)
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 land­
sapes of the central valley of California. Prerequisite: None. Hours: (27) 3 lect for 9
weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.

ORN H 75c  PLANT MAINTENANCE AND IDENTIFICATION (3 units)
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.
Prerequisite: None. Hours: (54) 3 lect. CCS: Occupational Education. Not
Transferable: Associate Degree only.

ORN H 77a  CARE AND MAINTENANCE OF TURF EQUIPMENT (1 unit)
The student will learn how to identify and correct problems encountered when servic­
ing and caring for turf equipment. Prerequisite: None. Hours: (27) 1 lect, 2 lab for
9 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.

ORN H 78  LANDSCAPE MAINTENANCE/LAWS
AND REGULATIONS OF PEST CONTROL (1 unit)
Designed for students interested in securing the landscape pest control certificate re­
quired of all professional landscape gardeners who apply chemicals. Prerequisite:
Reading Level 2. Hours: (18) 1 lect. Repeat: 2. CCS: Occupational Education. Not
Transferable: Not degree applicable.

ORN H 79  LANDSCAPE MAINTENANCE/PEST,
DISEASE AND WEED CONTROL (1 unit)
Designed for students interested in the Qualified Applicator Certificate. Includes infor­
mation about the Qualified Applicator Certificate Examination, turf pest, insects and
mite control, weed control, and mushroom control in lawns. Prerequisite: Reading
Level 2. Hours: (18) 1 lect. Repeat: 2. CCS: Occupational Education. Not Trans­
ferable: Not degree applicable.

ORN H 200  FUNDAMENTALS OF NURSERY
MANAGEMENT AND PLANT PRODUCTION (8 units)
The initial course for the Ornamental Horticulture 2 + 2 Vocational Certificate Pro­
gram. Includes ORN H 1 (three hours lecture), ORN H 2 (two hours lecture and three
hours laboratory) plus an additional five hours of laboratory. Prerequisite: None.
Hours: (234) 5 lect, 8 lab and/or selected field trips. CCS: Occupational Education.
Not Transferable: Associate Degree only.
ORN H 300  LANDSCAPE INSTALLATION AND MAINTENANCE (8 units)  
Includes designated mathematics (three hours lecture), ORN H 3 (two hours lecture and three hours laboratory) plus an additional five hours of laboratory. Upon completion, a Certificate of Competency in Landscape Installation and Maintenance will be awarded. **Prerequisite:** ORN H 200 or evaluation by instructor. **Hours:** (234) 5 lect, 8 lab and/or selected field trips. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

SOILS

SOILS 1  INTRODUCTION TO SOIL SCIENCE (3 units)  
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. **Prerequisite:** Reading Level 1. **Hours:** (90) 2 lect, 3 lab. Field trips required. **CCS:** Occupational Education. **Transferable:** UC, CSU and Private Colleges.
ART

CERTIFICATE OF ACHIEVEMENT

PHOTOGRAPHY CERTIFICATE

This basic course of study in photography and the arts is designed to give the student a perspective on the artistic and professional aspects of photography. The one year program is dependent upon scheduling of classes. Students desiring further training may continue toward an associate degree or transfer to a four-year institution.

Minimum units required In discipline — 24

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>UN</th>
<th></th>
<th>UN</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 3ab Basic Design</td>
<td>3.0</td>
<td>ART 17ef Color Photography</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ART 3cd 3-Dimensional Design</td>
<td>3.0</td>
<td>ART 17gh Adv Photography</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ART 3ef Fund of Color I</td>
<td>3.0</td>
<td>ART 2ab Basic Drawing</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ART 17ab Elem Photography</td>
<td>3.0</td>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 17cd Intermed Photography</td>
<td>3.0</td>
<td>ART 2ef Figure Drawing</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommended Courses</th>
<th>UN</th>
<th></th>
<th>UN</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1 Appreciation</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 30a Anc Mediter Art</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 30b Medieval Art</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 30c Renaissance Art</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 30d Modern Art</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ASSOCIATE IN 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.

ART

Minimum units required in discipline – 18

| UN | ART 2ab Basic Drawing | 3.0 | ART OR | 1 Appreciation | 3.0 |
| UN | OR | ART 2ef Figure Drawing | 3.0 | OR | ART 30a Ancient Mediterranean Art | 3.0 |
| UN | OR | ART 3ab Basic Design | 3.0 | OR | ART 30b Medieval Renaissance | 3.0 |
| UN | OR | ART 3cd 3 Dimensional Design | 3.0 | OR | ART 30c Baroque to Modern Art | 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 17, 18 Photography Series
ART 30, 33, Art History Series

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: lect lecture; lab laboratory; demo demonstration; Repeat repeatability; CCS Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. NOTE: If repeatability is not shown, course may not be repeated.

ART 1 ART APPRECIATION (3 units)
Exploration of the creative process emphasizing art as a visual form of communication for both majors and non-majors. Useful criteria for evaluation and enjoyment of art through the development of a visual vocabulary and knowledge of art processes, as well as art in a historical context. Prerequisite: Reading Level 1. Hours: (54) 3 lect. Field trips required. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.
ART 2ab  BASIC DRAWING (3 units)
2a—2b (1.5—1.5) equivalent to 2ab.
A foundation in seeing through drawing. Emphasizes major theories and techniques in understanding composition and form. Systematic examination of graphic elements, their formal properties, relations and functions in the organization of graphic structures. Development of drawing as a medium of expression. Some field trips required. **Prerequisite:** 2a—Reading Level 1; 2b—ART 2a with a grade of “C.” **Hours:** (2ab—108) 6 lect/studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 2cd  ADVANCED DRAWING (3 units)
2c—2d (1.5—1.5) equivalent to 2cd.
A further study of realistic, abstract and non-objective drawing as related to form perception. Advanced projects in basic drawing techniques. **Prerequisite:** ART 2ab with a grade of “C.” **Hours:** (2cd—108) 6 lect/studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 2ef  FIGURE DRAWING (3 units)
2e—2f (1.5—1.5) equivalent to 2ef.
A beginning course in drawing designed to give the student special focus on the human figure as subject. Emphasizes dynamic considerations of drawing as observed in the human form through a study of its structure, anatomy, design, and expression. **Prerequisite:** 2e—Reading Level 1; 2f—ART 2e with a grade of “C.” **Hours:** (2ef—108) 6 lect/studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 2gh  ADVANCED FIGURE DRAWING (3 units)
2g—2h (1.5—1.5) equivalent to 2gh.
Advanced study in exploration of the expressive character of the human figure. Emphasizes manipulation of the visual elements of drawing to communicate statements of emotion and convey character and mood through the drawing’s abstract and structural condition. **Prerequisite:** ART 2ef with a grade of “C.” **Hours:** (2gh—108) 6 lect/studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 2ij  ADVANCED PROJECTS IN DRAWING (3 units)
2i—2j (1.5—1.5) equivalent to 2ij.
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: purely aesthetic concerns will be emphasized and deeper analysis of composition and style in that context will be the main objective of the course. **Prerequisite:** 2i—ART 2cd or 2gh with a grade of “C”; 2j—2i with a grade of “C.” **Hours:** (2ij—108) 6 lect/studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.
ART 3ab  BASIC DESIGN (3 units)
3a—3b (1.5—1.5) equivalent to 3ab.
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. **Prerequisite:** 3a—Reading Level 1; 3b—ART 3a with a grade of “C.” **Hours:** (3ab—108) 6 lect/studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 3cd  THREE DIMENSIONAL DESIGN (3 units)
3c—3d (1.5—1.5) equivalent to 3cd.
Study of design elements (line, plane, volume, color, texture) as they apply to three dimensions in terms of tension, balance, dominance, movement and proportion, using a variety of simple materials, such as cardboard, wood, clay, plaster and wire. **Prerequisite:** 3c—Reading Level 1; 3d—ART 3c with a grade of “C.” **Hours:** (3cd—108) 6 lect/studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

ART 3ef  FUNDAMENTALS OF COLOR 1 (3 units)
3e—3f (1.5—1.5) equivalent to 3ef.
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. **Prerequisite:** 3e—Reading Level 1; 3f—ART 3e with a grade of “C.” **Hours:** (3ef—108) 6 lect/studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 3gh  FUNDAMENTALS OF COLOR 2 (3 units)
3g—3h (1.5—1.5) equivalent to 3gh.
Fundamental color mechanics and aesthetics as they relate to design and graphic applications. **Prerequisite:** 3g—ART 3ef with a grade of “C”; 3h—ART 3g with a grade of “C.” **Hours:** (3gh—108) 2 lect, 4 studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 4ab  BASIC PAINTING — ACRYLIC MEDIA (3 units)
4a—4b (1.5—1.5) equivalent to 4ab.
Basic principles of acrylic color mixing and color harmony including basic composition, particularly those aspects with grouping color movements on both the picture plane and the illusionary space. **Prerequisite:** 4a—Reading Level 1; 4b—ART 4a with a grade of “C.” **Hours:** (4ab—108) 2 lect, 4 studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 4cd  ADVANCED PAINTING — ACRYLIC MEDIA (3 units)
4c—4d (1.5—1.5) equivalent to 4cd.
An extension of ART 4ab. Emphasizes shifts from technical information to problems of composition and design. **Prerequisite:** 4c—ART 4ab with a grade of “C”; 4d—ART
ART 4ef  WATER COLOR PAINTING (3 units)
4e—4f (1.5—1.5) equivalent 4ef.
ART 4e is a systematic study of watercolor techniques and materials; 4f is a study of
the aesthetic application of those techniques in composition. Prerequisite:
4e—Reading Level 1; 4f—ART 4e with a grade of “C.” Hours: (4ef—108) 1 lect/2
studio. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 4gh  FIGURE PAINTING (3 units)
4g—4h (1.5—1.5) equivalent to 4gh.
Guided work from the figure using traditional as well as innovative oil painting techniques.
Emphasizes the figure in harmony with its environment. Both color and black and white
studies. Prerequisite: 4g—ART 2ab or 2ef with a grade of “C”; 4h—ART 4g with a
grade of “C.” Hours: (4gh—108) 2 lect, 4 studio. Field trips may be required. CCS:
Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit
limitations. For specific information see counselor.

ART 5ab  BASIC OIL PAINTING (3 units)
5a—5b (1.5—1.5) equivalent to 5ab.
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. Prerequisite:
5a—Reading Level A; 5b—ART 5a with a grade of “C.” Hours: (5ab—108) 6
lect/studio. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private
Colleges. UC credit limitations. For specific information see counselor.

ART 5ef  INTERMEDIATE OIL PAINTING (3 units)
5e—5f (1.5—1.5) equivalent to 5ef.
Study of illusions in space and movement as used for expressive impact. Varied subject
matter and painting styles will be emphasized including experimentation within a
structured program and concepts developed in ART 5ab and 5cd. Prerequisite:
5e—ART 5cd with a grade of “C”; 5f—ART 5e with a grade of “C.” Hours:
(5ef—108) 2 lect, 4 studio. CCS: Liberal Arts and Sciences. Transferable: UC,
CSU and Private Colleges. UC credit limitations. For specific information see counselor.
ART 5gh ADVANCED OIL PAINTING (3 units)
5g—5h (1.5—1.5) equivalent to 5gh.
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. **Prerequisite:** 5g—ART 5ef with a grade of “C”; 5h—ART 5g with a grade of “C.” **Hours:** (5gh—108) 6 lect/studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 6ab CERAMICS — HANDBUILDING (3 units)
6a—6b (1.5—1.5) equivalent to 6ab.
Exploration of glaze calculation and kiln firing including advanced work in basic techniques of methods, concepts, and materials related to clay. **Prerequisite:** 6a—Reading Level 1; 6b—ART 6a with a grade of “C.” **Hours:** (6ab—108) 2 lect, 4 studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 6cd CERAMICS — ADVANCED HANDBUILDING (3 units)
6c—6d (1.5—1.5) equivalent to 6cd.
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. **Prerequisite:** 6c—ART 6ab with a grade of “C”; 6d—ART 6c with a grade of “C.” **Hours:** (6cd—108) 6 lect/studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 7ab CERAMICS — BASIC (3 units)
7a—7b (1.5—1.5) equivalent to 7ab.
Basic ceramic materials and techniques. Preparation, handbuilding, wheel throwing, design techniques and glaze application are explored. **Prerequisite:** 7a—Reading Level 1; 7b—ART 7a with a grade of “C.” **Hours:** (7ab—108) 1 lect/2 studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 7cd CERAMICS — INTERMEDIATE (3 units)
7c—7d (1.5—1.5) equivalent to 7cd.
Exploration of glaze calculation and kiln firing including advanced work in basic techniques of methods, concepts, and materials related to clay. **Prerequisite:** 7c—ART 7ab with a grade of “C”; 7d—ART 7c with a grade of “C.” **Hours:** (7cd—108) 2 lect, 4 studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.
ART 7ef  CERAMICS – ADVANCED (3 units)
7e—7f (1.5—1.5) equivalent to 7ef.
Designed to offer the student an opportunity to further develop basic ceramic skills. Advanced work in glaze calculations, kiln firing and clay constructions. Prerequisite: 7e—ART 7cd with a grade of “C”; 7f—ART 7f with a grade of “C.” Hours: (7ef—108) 6 lect/studio. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 7gh  CERAMICS – ADVANCED (3 units)
7g—7h (1.5—1.5) equivalent to 7gh.
Special projects in advanced ceramic techniques. Individual research problems in kiln building, wheel building, tool construction and production techniques. Prerequisite: 7g—ART 7ef with a grade of “C”; 7h—ART 7g with a grade of “C.” Hours: (7gh—108) 2 lect, 4 studio. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 8ab  JEWELRY (3 units)
8a—8b (1.5—1.5) equivalent to 8ab.
Fundamental techniques and processes are studied in the designing, forming, and finishing of jewelry and other articles in the soft metals, such as brass, copper, gold, and sterling silver. Prerequisite: 8a—Reading Level A; 8b—ART 8a with a grade of “C.” Hours: (8ab—108) 6 lect/studio. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

ART 8cd  JEWELRY (3 units)
8c—8d (1.5—1.5) equivalent to 8cd.
A continuation of beginning jewelry with an explanation of the “lost wax process,” experimental casting and stone setting. Prerequisite: 8c—ART 8ab with a grade of “C”; 8d—ART 8c with a grade of “C.” Hours: (8cd—108) 6 lect/studio. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

ART 8ef  ADVANCED JEWELRY (3 units)
8e—8f (1.5—1.5) equivalent to 8ef.
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. Prerequisite: 8e—ART 8cd with a grade of “C”; 8f—ART 8e with a grade of “C.” Hours: (8ef—108) 6 lect/studio. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

ART 8gh  ADVANCED JEWELRY (3 units)
8g—8h (1.5—1.5) equivalent to 8gh.
A continuation of ART 8ef with emphasis on independent study, special problems and marketing procedures. Prerequisite: 8g—ART 8ef with a grade of “C”; 8h—ART 8g with a grade of “C.” Hours: (8gh—108) 6 lect/studio. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.
ART 9ab  GLASS DESIGN – GLASS BLOWING (3 units)
9a—9b (1.5—1.5) equivalent to 9ab.
Basic techniques of handblown glass including glass as an expressive medium in a lead-
ed glass panel. **Prerequisite:** 9a—Reading Level 1; 9b—ART 9a with a grade of “C.”
**Hours:** (9ab—108) 2 lect/demo, 4 studio. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

ART 9cd  ADVANCED GLASS DESIGN (3 units)
9c—9d (1.5—1.5) equivalent to 9cd.
Advanced techniques of off-hand glass blowing. Extended exploration of the medium 
of art glass including more advanced blowing techniques, exploration of color, decora-
tion and studio construction. **Prerequisite:** 9c—ART 9ab with a grade of “C”; 
9d—ART 9c with a grade of “C.” **Hours:** (9cd—108) 2 lect/demo, 4 studio. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

ART 11ab  SCULPTURE (3 units)
11a—11b (1.5—1.5) equivalent to 11ab.
An exploration of sculptural concepts and their translation into three-dimensional 
forms. Problems involving various technical means and the functions of materials and 
techniques in the creative process. **Prerequisite:** 11a—Reading Level 1; 11b—ART 
11a with a grade of “C.” **Hours:** (11ab—108) 6 lect/studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 11cd  ADVANCED SCULPTURE (3 units)
11c—11d (1.5—1.5) equivalent to 11cd.
Advanced study in the exploration of sculptural concepts. Emphasizes expressive 
meaning of form and potential of materials. **Prerequisite:** 11c—ART 11ab with a grade of “C”; 
11d—ART 11c with a grade of “C.” **Hours:** (11cd—108) 6 lect/studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 12ab  FIGURE SCULPTURE (3 units)
12a—12b (1.5—1.5) equivalent to 12ab.
Emphasis on perceiving and establishing the human form in sculptural materials. **Prere-
quisite:** 12a—Reading Level 1; 12b—ART 12a with a grade of “C.” **Hours:** 
(12ab—108) 6 lect/studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU 
and Private Colleges. UC credit limitations. For specific information see counselor.

ART 12cd  ADVANCED FIGURE SCULPTURE (3 units)
12c—12d (1.5—1.5) equivalent to 12cd.
An exploration of the expressive potential of the human form in sculpture. Emphasizes the 
role of materials and techniques in the translation of the figure in sculptural terms. **Prere-
quisite:** 12c—ART 12ab with a grade of “C”; 12d—ART 12c with a grade of “C.” 
**Hours:** (12cd—108) 6 lect/studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, 
CSU and Private Colleges. UC credit limitations. For specific information see counselor.
ART 13ab  BEGINNING PRINTMAKING: SILK SCREEN (3 units)
13a—13b (1.5—1.5) equivalent to 13ab.
An exploration of the expressive potential of the fine art print through the knowledge
gained in the printing techniques of serigraphy and relief printing. **Prerequisite:**
13a—Reading Level 1; 13b—ART 13a with a grade of “C.” **Hours:** (13ab—108) 6
lect/studio. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private
Colleges. UC credit limitations. For specific information see counselor.

ART 13cd  BEGINNING PRINTMAKING:
INTAGLIO AND MONOPRINT (3 units)
13c—13d (1.5—1.5) equivalent to 13cd.
Expressive potential of the fine art print through the knowledge gained in intaglio and
monotype printing techniques. **Prerequisite:** 13c—Reading Level 1; 13d—ART
13c with a grade of “C.” **Hours:** (13cd—108) 2 lect, 4 studio. **CCS:** Liberal Arts
and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For
specific information see counselor.

ART 13ef  ADVANCED PRINTMAKING (3 units)
13e—13f (1.5—1.5) equivalent to 13ef.
Emphasizes multi-color plates and exploratory techniques. Introduction to
lithography. **Prerequisite:** 13e—ART 13cd with a grade of “C”; 13f—ART 13e with
a grade of “C.” **Hours:** (13ef—108) 2 lect, 4 studio. Field trips may be required.
**CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC
credit limitations. For specific information see counselor.

ART 13gh  ADVANCED PRINTMAKING (3 units)
13g—13h (1.5—1.5) equivalent to 13gh.
Emphasizes independent study, special problems and exhibition procedures. **Pre-
requisite:** 13g—ART 13ef with a grade of “C”; 13h—ART 13g with a grade of “C.”
**Hours:** (13gh—108) 2 lect, 4 studio. Field trips may be required. **CCS:** Liberal Arts
and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For
specific information see counselor.

ART 14ab  LETTERING (3 units)
14a—14b (1.5—1.5) equivalent to 14ab.
A study of basic letter forms; history and development of writing, with emphasis on
calligraphy as a fine art. Includes creative lettering design and introduction to lettering
for advertising and reproductions. **Prerequisite:** 14a—Reading Level 1; 14b—ART
14a with a grade of “C.” **Hours:** (14ab—108) 6 lect/studio. **CCS:** Liberal Arts and
Sciences. **Transferable:** CSU and Private Colleges.

ART 14cd  GRAPHIC DRAWING (3 units)
14c—14d (1.5—1.5) equivalent to 14cd.
Drawing objects and room interiors in correct scale as related to people. Work will be
done in line and some projects in color. Includes free-hand and instrument drawing.
**Prerequisite:** 14c—Reading Level 1; 14d—ART 14c with a grade of “C.” **Hours:**
(14cd—108) 2 lect, 4 studio. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU
and Private Colleges.
ART 14ef  GRAPHIC ILLUSTRATION (3 units)
14e—14f (1.5—1.5) equivalent to 14ef.
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. Prerequisite: 14e—Reading Level 1; 14f—ART 14e with a grade of “C.” Hours: (14ef—108) 6 lect/studio. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

ART 15ab  GRAPHIC DESIGN (3 units)
15a—15b (1.5—1.5) equivalent to 15ab.
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. Prerequisite: 15a—Reading Level 1; 15b—ART 15a with a grade of “C.” Hours: (15ab—108) 6 lect/studio. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

ART 15cd  ADVERTISING GRAPHICS (3 units)
15c—15d (1.5—1.5) equivalent to 15cd.
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. Prerequisite: 15c—Reading Level 1; 15d—ART 15c with a grade of “C.” Hours: (15cd—108) 6 lect/studio. Field trips required. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

ART 17ab  ELEMENTARY PHOTOGRAPHY (3 units)
17a—17b (1.5—1.5) equivalent to 17ab.
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. Prerequisite: 17a—Reading Level 1; 17b—ART 17a with a grade of “C.” Hours: (17ab—108) 6 lect/studio. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 17cd  INTERMEDIATE PHOTOGRAPHY (3 units)
17c—17d (1.5—1.5) equivalent to 17cd.
The student will complete assignments that will emphasize the refinement of technique and personal expression. A suitable adjustable camera is required. Prerequisite: 17c—ART 17ab with a grade of “C” or equivalent; 17d—ART 17c with a grade of “C.” Hours: (17cd—108) 6 lect/studio. Field trips required. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 17ef  COLOR PHOTOGRAPHY (3 units)
17e—17f (1.5—1.5) equivalent to 17ef.
An advanced course designed to give the student an introduction to color photography. There will be problems in color processing; color reversal material and
color printing from color negatives. Emphasizes color theory, and the perceptive aspects of color will be related through assignments. **Prerequisite:** 17e—ART 17ab with a grade of “C”; 17f—ART 17e with a grade of “C”; evaluation by instructor. **Hours:** (17ef—108) 6 lect/studio. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

**ART 17gh** ADVANCED PHOTOGRAPHY (3 units)
17g—17h (1.5—1.5) equivalent to 17gh.
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 and studio. The student emphasizes work in an area of personal interest. Technically proficient work of a creative and original nature is expected. **Prerequisite:** 17g—ART 17cd or 17ef with a grade of “C”; 17h—ART 17g with a grade of “C.” Reading Level 1. **Hours:** (17gh—108) 6 lect/studio. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

**ART 17ij** PHOTOGRAPHIC PROBLEMS (3 units)
17i—17j (1.5—1.5) equivalent to 17ij.
An advanced course designed to strengthen the student’s technical skills and involvement in various visual photographic problems directed toward creativity and non-verbal communication. **Prerequisite:** Evaluation by instructor and Reading Level 1. **Hours:** (17ij—108) 6 lect/studio. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

**ART 18ab** INDIVIDUAL PROJECTS IN PHOTOGRAPHY (2 units)
18a—18b (1—1) equivalent to 18ab.
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. **Prerequisite:** Reading Level 1; evaluation by instructor. **Hours:** (18ab—72) 1 lect, 3 studio. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

**ART 25ab** ART GALLERY MANAGEMENT AND ART PORTFOLIO DEVELOPMENT (3 units)
25a—25b (1.5—1.5) equivalent to 25ab.
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. **Prerequisite:** 25a—Reading Level 1; 25b—ART 25a with a grade of “C.” **Hours:** (25ab—108) 6 lect/studio. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.
ART 29 SPECIAL STUDIES IN ART (0.5 – 3 units. Limit 9 units.)
Selected advanced projects with class content and unit credit to be determined by instructor and student. **Prerequisite:** Reading Level 1; permission of instructor and completion of beginning courses concurrently offered in selected medium. **Hours:** (27-162) 1/2 lect, 1 studio to 3 lect, 6 studio. **Repeat:** 3, or until a maximum of 9 units is reached. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

ART 30a ANCIENT MEDITERRANEAN ART (3 units)
Slide lecture survey of the architecture, sculpture and painting of the ancient Mediterranean area from the Old Stone Age to the time of Constantine the Great. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

ART 30b MEDIEVAL ART (3 units)
Styles and cultural contexts of the art and architecture of Western Europe and the Byzantine Empire from the time of the catacombs in Rome to late Gothic in Northern and Central Europe (Fifteenth Century). **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

ART 30c RENAISSANCE ART (3 units)
Slide presentation survey of the art of Europe from the 15th to 17th centuries. Includes Renaissance and Baroque periods in western Europe with emphasis on the art development in Italy. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

ART 30d MODERN ART (3 units)
Slide presentation of the survey of art from the 18th century to the present. Includes: rococo, romantic, realistic, art nouveau, fauve, expressionism, cubism, dada, surrealism, social realism, international, non-objective, and abstract styles in Europe and the United States. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

ART 33a ART OF ECUADOR (2 units)
Indian and European influences on the art of Ecuador. Emphasizes architecture, sculpture, and painting as well as artist personalities such as Santiago, Caspicara, and Cantuna. **Prerequisite:** Reading Level 1. **Hours:** (36) 2 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

ART 33b ART OF PERU (2 units)
The art of Peru including parts of Bolivia located in the Lake Titicaca area. Archaeological sites studied will include Machu Picchu and the Nazca Lines. Emphasizes art from Pre-Columbian periods. **Prerequisite:** Reading Level 1. **Hours:** (36) 2 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.
All behavioral science courses with a course number of 49 and below will transfer to state colleges, University of California campuses and to private universities. A student who plans to transfer behavioral science courses would be advised to check with their counselors to determine whether specific courses will be accepted as major credit or just as elective credit in their major.

The following program is recommended for students planning to major in behavioral science, anthropology, psychology or sociology at a four-year institution.

**ANTHROPOLOGY**

The objective of this program is to prepare the student for upper-division study in anthropology at a four-year college or university. Anthropology focuses on the variety of human cultural patterns, both past and present, to create an awareness and understanding of the science of human behavior. Archaeology, international relations, linguistics, genetics and cross-cultural behavior are but a few of the fields in which anthropologists work. 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**

Sociology studies groups, institutions, social relationships, and social problems in contemporary society. The sociology major prepares for careers in law, social work, urban development, law enforcement agencies, public service, counseling, mental health, teaching, and community service.

Recommended for students planning to major in anthropology, psychology, sociology or as a Behavioral Science Major.
ANTH 1 PHYSICAL ANTHROPOLOGY (3 units)
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. **Prerequisite:** Reading Level 1; English Level 2. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. (CAN: ANTH 2)

ANTH 2 CULTURAL ANTHROPOLOGY (3 units)
The study of world cultures which will provide a foundation for a better understanding of all human societies, including the United States. Involves a comparative examination of different cultures, including both primitive and modern societies. Includes the study of culture and personality, subsistence patterns, economic and political systems, warfare and aggression, kinship and social organization, religion and culture change. **Prerequisite:** Reading Level 1. English Level 2. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. (CAN: ANTH 4)

ANTH 5 NORTH AMERICAN INDIANS (3 units)
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. **Prerequisite:** Reading Level 1; English Level 2. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.
PSYCHOLOGY

PSYCH 1a  GENERAL PSYCHOLOGY (3 units)
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. Prerequisite: Reading Level 1; English Level 2. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor. (CAN: PSY 2)

PSYCH 1ah  HONORS GENERAL PSYCHOLOGY (3 units)
Although similar in content to PSYCH 1a, topics are treated at the greater depth required for psychology majors and others intending to pursue upper division and/or graduate work in psychology. Recommended for students planning to transfer to the University of California. Prerequisite: Reading Level 1 and eligibility for ENGL 1a. Hours: (54) 3 lect/discussion. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

PSYCH 1b  PHYSIOLOGICAL PSYCHOLOGY (3 units)
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. Prerequisite: PSYCH 1a. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

PSYCH 5  ELEMENTARY STATISTICS FOR THE BEHAVIORAL AND SOCIAL SCIENCES (3 units)
Statistics as applied to the behavioral and social sciences. Emphasizes research design, the organization of data, measures of central tendency and variability, the normal curve, correlation and regression, hypothesis testing, parametric and nonparametric techniques, and one-way and two-way analysis of variance. Prerequisites: An introductory course in Psychology, Sociology, Anthropology, Economics, Political Science or concurrent enrollment. Two years of high school algebra or equivalent. Reading Level 1. ENGL Level 2 eligibility. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

PSYCH 6  INTRODUCTION TO BEHAVIORAL SCIENCE RESEARCH (3 units)
An introduction to behavioral and social science research, including research design, data collection and analysis, and the development of computer skills. Students will collect and analyze data from computer-controlled psychological tests, experiments, questionnaires, polls and other devices. Prerequisite: An introductory course in Psychology, Sociology, Anthropology, Economics or Political Science and PSYCH 5 (may be taken concurrently) or its equivalent. Reading Level 1. ENGL Level 2 eligibility. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.
PSYCH 20 SOCIAL PSYCHOLOGY (3 units)
Examines the effects of group behavior on the individual, including, but not limited to, the study of conformity, mass communication, propaganda, persuasion, attitude formation, and attitude change. Also discussed are self-justification, pro-social behavior, aggression, prejudice, attraction, attribution, perception, motivation, and interpersonal relations. Includes the application of the scientific method and research strategies in social psychology. **Prerequisite:** SOC 1 or PSYCH 1a. Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. **Note:** Not open to students with credit in SOC 20.

PSYCH 21a—21b—21c—21d SPECIAL PROJECTS
(1—1—1—1 unit. Limit of 4 units.)
Psychological Assistant and tutor. Work primarily in a tutorial relationship with students enrolled in a course in which the enrollee has completed with a high level of mastery. **Prerequisite:** PSYCH 1a with a grade of “B” and completion of the course in student will be assisting with a grade of “B.” **Hours:** (54-216) 3-12 lab by arrangement. **Repeat:** 3, or until a maximum of 4 units is reached. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and selected institutions. Credit limitations. For specific information see counselor.

PSYCH 25 STATES OF CONSCIOUSNESS (3 units)
A basic study of comparative states of consciousness including focused awareness, sleep, dreaming, hypnosis, meditation, sensory deprivation, and chemical alterations. Emphasizes both physiological and psychological characteristics of states of awareness. **Prerequisite:** PSYCH 1a. Reading Level 1; English Level 2. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges. Credit limitations. For specific information see counselor.

PSYCH 30 HUMAN SEXUALITY (3 units)
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. **Prerequisite:** Reading Level 1; English Level 2. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

PSYCH 31 MARRIAGE (3 units)
A basic study of the institution of marriage. Covers some historical aspects of marriage and family life. Emphasizes attitudes, feelings, communication, and adjustment to marriage in a changing society. **Prerequisite:** Reading Level 1; English Level 2. **Hours:** (54) 3 lect/disc. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. **Note:** Not open to students with credit in FAM S 31.
PSYCH 32  MARRIAGE AND FAMILY RELATIONSHIPS (3 units)
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. Prerequisite: Reading Level 1; English Level 3. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

PSYCH 33 PERSONAL AND SOCIAL ADJUSTMENT (3 units)
Theories and 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. Failures of adjustment in the form of neurosis, psychosis, psychosomatic disorders, and character disorders are studied, and consideration is given to the basic methods of psychotherapy and behavior therapy. Prerequisite: PSYCH 1a or grade of “B” in PSYCH 51. Reading Level 1; English Level 2. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

PSYCH 34  THE UNMARRIED ADULT: DIVORCED, WIDOWED AND SINGLE BY CHOICE (3 units)
Develops 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. Students will better understand their own goals, values, and motives as they relate to relationships. Prerequisite: Reading Level 1; English Level 3. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

PSYCH 37  PSYCHOLOGY OF SEX DIFFERENCES (3 units)
Understanding 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. Includes emphasis on application of the aforementioned theoretical knowledge to the life of the student. Prerequisite: Reading Level 1; English Level 3. PSYCH 51 or PSYCH 1a recommended. Hours: (54) 3 lect/discussion. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

PSYCH 40  CHILD PSYCHOLOGY AND DEVELOPMENT (3 units)
Studies the growth and development of children. Emphasizes intellectual and personality development as well as the handling of behavior problems through guidance and discipline. Prerequisite: PSYCH 1a recommended. Reading Level 1; English Level 2. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

PSYCH 45  BEHAVIOR MODIFICATION (3 units)
An introduction to the basic principles of learning theory and their application to behavioral change. Lectures cover operant conditioning, techniques based upon operant conditioning, classical conditioning, techniques based upon the classical conditioning model, observational learning, and techniques based upon observational
learning. Covers a comparison of the medical/learning model of mental illness, and a unit on physiological feedback. **Prerequisite:** PSYCH 1a. **Hours:** (54) 3 lect/disc. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

**PSYCH 51 PSYCHOLOGY FOR LIFE (3 units)**
A non-theoretical approach to the study of human behavior, designed to assist students in coping with the problems of everyday life. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

**PSYCH 57 UNDERSTANDING SELF AND OTHERS (3 units)**
Introduction to human interaction. A group course which utilizes discussion and group experiences to increase understanding of oneself and others. **Prerequisite:** None. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

**SOCIOLOGY**

**SOC 1 INTRODUCTION TO SOCIOLOGY (3 units)**
A survey of areas of concentration in sociology, including the study of social groups; culture; socialization processes; social deviance; social stratification; ageism, sexism; racism; ethnicity; social inequality; demography; urbanization; collective behavior; family, religious, educational, economic and political institutions; and social change. **Prerequisite:** Reading Level 1; English Level 2. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. (CAN: SOC 2)

**SOC 2 PROBLEMS OF MODERN SOCIETY (3 units)**
Studies the social problems of modern society, especially in the United States, in order to arrive at alternate methods of identification and measurement of social problems. An attempt to gain understanding by judging the probable results of proposed changes. Problems include deviant behavior, including crime and delinquency, alcoholism, family violence, deviant subcultures, problems of man in industrial society, including the industrial workers and white collar workers. Also stress and mental illness. **Prerequisites:** Reading Level 1; English 1 eligibility. Introductory Sociology, Psychology, or Anthropology, or evaluation by instructor. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. (CAN: SOC 4)

**SOC 5 COMMUNITY SERVICE (1-2 units per semester. Limit 8 units.)**
Enables student to work with community service organizations. Under supervision, assisting the mentally ill, the aged and delinquents are a few examples. **Prerequisite:** Reading Level 1. **Hours:** (18-36) 1 seminar and 2-5 field work per week. **Repeat:** 3, or until 8 units is reached. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges. UC credit limitations. For specific information see counselor.
SOC 10  TOPICS IN SOCIOLOGY (0.5–2 units. Limit 8 units.)
Selected topics in sociology which coincide with current student interests, special guest speakers, recent developments within the field, or events of importance to the community. **Prerequisite:** Successful completion of SOC 1. **Hours:** (9-36) 3 lect for 3-12 weeks. **Repeat:** 3 or until a maximum of 8 units is reached. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

SOC 20  SOCIAL PSYCHOLOGY (3 units)
Examines the effects of group behavior on the individual, including, but not limited to, the study of conformity, mass communication, propaganda, persuasion, attitude formation, and attitude change. Also discusses self-justification, pro-social behavior, aggression, prejudice, attraction, attribution, perception, motivation, and interpersonal relations. Includes the application of the scientific method and research strategies in social psychology. **Prerequisite:** SOC 1 or PSYCH 1a. **Reading Level 1.** **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. **Note:** Not open to students with credit in PSYCH 20.

SOC 28  WOMEN IN THE WORLD (3 units)
Study of woman’s role in the different parts of the world examining past activities and contributions of women in different societies. Attempts to gain understanding of changes and impact upon women’s roles due to their cultural backgrounds. Societies include Israel, India, the United States, Europe, Africa, and Latin America. **Prerequisite:** Reading Level 1; English Level 3. **Hours:** (54) 3 lect/discussion. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. **Note:** Not open to students with credit in GN ST 28.

SOC 30  BLACK SOCIOLOGY (3 units)
An introductory course covering the socio-economic characteristics of the Black culture. A study of the inter-relationships of Blacks and society as a whole emphasizing the Black perspective. **Prerequisite:** Reading Level 1; English Level 3. **Hours:** (54) 3 lect. **Repeat:** 1. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

SOC 36  SOCIOLOGY OF THE CHICANO (3 units)
A survey course covering the socioeconomic characteristics of the Chicano community. 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. **Prerequisite:** Reading Level 1; English Level 3. **Hours:** (54) 3 lect/discussion. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. **Note:** Not open to students with credit in CH ST 36.
SOC 36L  FIELD WORK IN CHICANO SOCIOLOGY (2 units)
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. Prerequisite: Reading Level 1. Hours: (36) 2 lect/seminar and 4 fieldwork. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges. Note: Not open to students with credit in CH ST 36L.

SOC 50  APPLIED SOCIOLOGY (3 units)
A non-theoretical approach to the study of sociological concepts, societal conflict, and social change. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.
BUSINESS EDUCATION

Accounting
Banking
Business Administration
Insurance
Management
Marketing
Office Training
Real Estate
Small Business

CERTIFICATES OF COMPLETION AND ACHIEVEMENT

These training programs are designed for those students who prefer to learn the fundamental skills required to get a job as quickly as possible. Many of the courses listed in the certificate programs will not transfer to a four-year institution. Students wishing to progress beyond the certificate level should consult with a counselor to ensure the courses they are taking will be acceptable toward the degrees they are seeking.

BOOKKEEPING CERTIFICATE

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

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 53a</td>
<td>Intro Accounting 1</td>
<td>3.0</td>
<td>ACCTG 64</td>
<td>Appl Acctg Micro</td>
<td>1.5</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
<td>ACCTG 64L</td>
<td>Lab-Appl Acctg Micro</td>
<td>0.5</td>
</tr>
<tr>
<td>ACCTG253a</td>
<td>Intro Accounting 1</td>
<td>3.0</td>
<td>BUS</td>
<td>53 B Math/Elecrtnc Calc</td>
<td>4.0</td>
</tr>
<tr>
<td>ACCTG 53b</td>
<td>Intro Accounting 2</td>
<td>3.0</td>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
<td>BUS</td>
<td>253 B Malth/Electmc Calc</td>
<td>4.0</td>
</tr>
<tr>
<td>ACCTG253b</td>
<td>Intro Accounting 2</td>
<td>3.0</td>
<td>OFF T</td>
<td>250a Beg Typing-Part 1</td>
<td>1.0</td>
</tr>
<tr>
<td>ACCTG 54</td>
<td>Payroll Accounting</td>
<td>3.0</td>
<td>OFF T</td>
<td>62 Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCTG254</td>
<td>Payroll Accounting</td>
<td>3.0</td>
<td>OFF T</td>
<td>262 Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCTG 62</td>
<td>Acctg/Microcomputer</td>
<td>1.5</td>
<td>DTA P</td>
<td>52 Intr Microcomputer</td>
<td>1.0</td>
</tr>
<tr>
<td>ACCTG 62L</td>
<td>Lab-Acctg/Micro</td>
<td>0.5</td>
<td>DTA P</td>
<td>52L Lab-Intr Micro</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Other Suggested Courses

BUS 40 Personal Finance (3); BUS 58 Human Relat/Motivat (3).
CALIFORNIA REAL ESTATE CERTIFICATE

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

Student must achieve a "C" grade.

Required Courses
(Should be taken in listed order)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>REST 39</td>
<td>Prin of Real Estate</td>
<td>3.0</td>
<td>REST 63</td>
<td>Real Est Appraisal</td>
<td>3.0</td>
</tr>
<tr>
<td>REST 60</td>
<td>Legal Aspcts RI Est</td>
<td>3.0</td>
<td>REST 62</td>
<td>Real Estate Finance</td>
<td>3.0</td>
</tr>
<tr>
<td>REST 64</td>
<td>Real Est Practice</td>
<td>3.0</td>
<td>REST 61</td>
<td>Real Est Economics</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Other Suggested Courses

R EST 65 Inc Tax/RI Est Inv (3), R EST 68 Adv RI Est Appraisal (3); DTA P 1 Intro Data Process (3); ACCTG approved course (3); MKTG 62 Fund of Persn Sell (3), MKTG 64 Fund of Advertising (3); MNGMT Approved Course (3).

GENERAL OFFICE CERTIFICATE

Upon completion of the following courses with at least a "C" grade in each course, a student will be awarded a "General Office Clerk/Typist" Certificate of Achievement.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF T 54</td>
<td>Ltr/Memo Writing</td>
<td>1.5</td>
<td>OFF T 62</td>
<td>Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>OFF T 56</td>
<td>Office Procedures</td>
<td>3.0</td>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF T 57</td>
<td>Secretarial Acctng</td>
<td>1.5</td>
<td>OFF T 262</td>
<td>Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>OFF T 50ac</td>
<td>Beginning Typing</td>
<td>3.0</td>
<td>OFF T 275</td>
<td>Filing</td>
<td>1.5</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
<td>OFF T 277</td>
<td>Machine Transcriptn</td>
<td>1.5</td>
</tr>
<tr>
<td>OFF T 250ac</td>
<td>Beginning Typing</td>
<td>3.0</td>
<td>BUS 58</td>
<td>Human Relat/Motivat</td>
<td>3.0</td>
</tr>
<tr>
<td>OFF T 250df</td>
<td>Intermediate Typing</td>
<td>3.0</td>
<td>BUS 264</td>
<td>Ten-Key Proficiency</td>
<td>1.5</td>
</tr>
<tr>
<td>OFF T 250g</td>
<td>Production Typing</td>
<td>1.0</td>
<td>DTA P 52</td>
<td>Intro Microcomputer</td>
<td>1.5</td>
</tr>
<tr>
<td>OFF T 260</td>
<td>Spelling Off/Trnees</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Suggested Courses

OFF T 264 "How to" Bus Engl (1.5).

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.
**BAKERSFIELD COLLEGE**

### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>UN</th>
<th>Course</th>
<th>Credits</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS A 18</td>
<td>3.0</td>
<td>OFF T 250g Production Typing</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 58</td>
<td>3.0</td>
<td>OFF T 260 Spelling Off/Trnns</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF T 54</td>
<td>1.5</td>
<td>OFF T 62 Business English</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF T 268b</td>
<td>2.3</td>
<td>OR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF T 60b</td>
<td>1.5</td>
<td>OFF T 262 Business English</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF T 73</td>
<td>1.5</td>
<td>OFF T 75 Filing</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF T 65</td>
<td>1.5</td>
<td>OFF T 277 Machine Transcriptn</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF T 74</td>
<td>3.0</td>
<td>OR</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### MANAGEMENT/PUBLIC ADMINISTRATION CERTIFICATE

Upon completion of the following courses with at least a "C" grade in each course, a student will be awarded a Management/Public Administration Certificate of Achievement.

#### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>UN</th>
<th>Course</th>
<th>Credits</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 60a</td>
<td>1.0</td>
<td>MGMT 65b Prin Wrtng Bus/Pub O</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGMT 60b</td>
<td>1.0</td>
<td>MGMT 65c Orgn Communications</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGMT 61</td>
<td>1.5</td>
<td>MGMT 66  Case Studies in Mgt</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGMT 72</td>
<td>1.5</td>
<td>Approved Course</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGMT 65a</td>
<td>1.5</td>
<td>AND</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Electives - Minimum of 6 units

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 70</td>
<td>1.5</td>
<td>MGMT 74  Labor Relations</td>
</tr>
<tr>
<td>MGMT 71</td>
<td>1.5</td>
<td>MGMT 76  Mgmt Change/Conflict</td>
</tr>
<tr>
<td>MGMT 73</td>
<td>1.5</td>
<td>MGMT 77  Fund Public Admin</td>
</tr>
</tbody>
</table>

### SECRETARIAL CERTIFICATE

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

#### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>UN</th>
<th>Course</th>
<th>Credits</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 58</td>
<td>3.0</td>
<td>OFF T 66b Adv WordPerfect</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTA P 52</td>
<td>1.5</td>
<td>OFF T 66b Lab/Adv WrdPrfct</td>
<td>0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF T 20</td>
<td>4.0</td>
<td>AND</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td>OFF T 65 Wrd Processng Concep</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF T 266</td>
<td>3.0</td>
<td>OFF T 250abc Beginning Typing</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF T 54</td>
<td>1.5</td>
<td>OFF T 250df Intermediate Typing</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF T 57</td>
<td>1.5</td>
<td>OFF T 250g Producting Typing</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF T 62</td>
<td>3.0</td>
<td>OFF T 260 Spelling Off/Trnns</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td>OFF T 268a Gregg Shorthand D/T</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF T 262</td>
<td>3.0</td>
<td>OFF T 275 Filing</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF T 60a</td>
<td>1.5</td>
<td>OFF T 277 Machine Transcriptn</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF T 60b</td>
<td>1.5</td>
<td>OFF T 57 Secretarial Acctg</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF T 66a</td>
<td>1.0</td>
<td>AND</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF T 66a Lab/Intro WordPerfect</td>
<td>0.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Other Suggested Courses

BUS 264 Ten-Key Proficiency (1.5); OFF T 264 “How to” Bus Engl (1.5); OFF T 268b Gregg Shorthand D/T (1.5).

SMALL BUSINESS CERTIFICATE

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

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM BS 54</td>
<td>How/Start Small Bus</td>
<td>1.5</td>
<td>SM BS 67</td>
<td>Laws/Reglts/Sm Bs</td>
<td>1.0</td>
</tr>
<tr>
<td>SM BS 55</td>
<td>How/Finance Sm Bs</td>
<td>0.5</td>
<td>SM BS 68</td>
<td>Marktg Research</td>
<td>0.5</td>
</tr>
<tr>
<td>SM BS 56</td>
<td>How/Market Sm Bs</td>
<td>1.0</td>
<td>SM BS 71</td>
<td>How/Projct/Cash Flw</td>
<td>0.5</td>
</tr>
<tr>
<td>SM BS 60</td>
<td>How/Use Bkkg Sys</td>
<td>2.0</td>
<td>SM BS 72</td>
<td>Undrstndng Taxes</td>
<td>0.5</td>
</tr>
<tr>
<td>SM BS 61</td>
<td>How/Undstnd Fin Stmt</td>
<td>0.5</td>
<td>SM BS 73</td>
<td>How/Estblsh Adv Bdgt</td>
<td>0.5</td>
</tr>
<tr>
<td>SM BS 62</td>
<td>How/Mng Time/Strss</td>
<td>0.5</td>
<td>MGMT 60a</td>
<td>Intro Superv Trng</td>
<td>1.0</td>
</tr>
<tr>
<td>SM BS 63</td>
<td>Sm Bs/Insurance</td>
<td>0.5</td>
<td>MGMT 60b</td>
<td>Adv Supervisory Trn</td>
<td>1.0</td>
</tr>
<tr>
<td>SM BS 64</td>
<td>How/Prmote Pub Rltn</td>
<td>0.5</td>
<td>MGMT 61</td>
<td>Personnel Mgmt</td>
<td>1.0</td>
</tr>
<tr>
<td>SM BS 65</td>
<td>How/Cntrl Inv/Purchs</td>
<td>0.5</td>
<td>Approved Course</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>SM BS 66</td>
<td>How/Select/Orgzn</td>
<td>0.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF T 54</td>
<td>Ltr/Memo Writing</td>
<td>1.5</td>
<td>OFF T 277</td>
<td>Machine Transcript</td>
<td>1.5</td>
</tr>
<tr>
<td>OFF T 56</td>
<td>Office Procedures</td>
<td>3.0</td>
<td>OFF T 60a</td>
<td>Intr DecMate Wrd Pro</td>
<td>1.5</td>
</tr>
<tr>
<td>OFF T 65</td>
<td>Wrd Processng Cncpts</td>
<td>1.5</td>
<td>OFF T 60b</td>
<td>Adv DecMate Wrd Pro</td>
<td>1.5</td>
</tr>
<tr>
<td>OFF T 250ac</td>
<td>Beginning Typing</td>
<td>3.0</td>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF T 250df</td>
<td>Intermediate Typing</td>
<td>3.0</td>
<td>OFF T 66a</td>
<td>Intro/WordPerfect</td>
<td>1.0</td>
</tr>
<tr>
<td>OFF T 250g</td>
<td>Production Typing</td>
<td>1.0</td>
<td>OFF T 66b</td>
<td>Adv WordPerfect</td>
<td>1.0</td>
</tr>
<tr>
<td>OFF T 260</td>
<td>Spelling Off Trnees</td>
<td>1.5</td>
<td>OFF T 66b</td>
<td>Lab-Intro/WordPerfect</td>
<td>0.5</td>
</tr>
<tr>
<td>OFF T 62</td>
<td>Business English</td>
<td>3.0</td>
<td>DTA P 52</td>
<td>Intro Microcomputer</td>
<td>1.5</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
<td>BUS 58</td>
<td>Human Relat/Motivat</td>
<td>3.0</td>
</tr>
<tr>
<td>OFF T 262</td>
<td>Business English</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF T 275</td>
<td>Filing</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Suggested Courses

OFF T 264 “How to” Bus Engl (1.5)
"FAST TRACK" CERTIFICATE PROGRAMS

Available only at the Weill Institute of Bakersfield College

To complete a certificated FAST TRACK program within five to ten months, the student must meet all course prerequisites upon enrollment and attend classes at the Weill Institute for six hours per day when the college is in session. If the student does not attend for six hours per day, the certificate may still be awarded; however, it will take longer than five to ten months to complete.

"FAST TRACK" ACCOUNTING/PAYROLL CLERK CERTIFICATE

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

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Required Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 53a Intro Accounting</td>
<td>3.0</td>
<td>BUS 53 B Math/Elctnc Calc</td>
<td>4.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ACCTG253a Intro Accounting</td>
<td>3.0</td>
<td>BUS 253 B Math/Elctnc Calc</td>
<td>4.0</td>
</tr>
<tr>
<td>ACCTG 54 Payroll Accounting</td>
<td>3.0</td>
<td>OFF T 62 Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ACCTG254 Payroll Accounting</td>
<td>3.0</td>
<td>OFF T 262 Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCTG 62 Acctg/Microcomputer</td>
<td>1.5</td>
<td>OFF T 75 Filing</td>
<td>1.5</td>
</tr>
<tr>
<td>ACCTG 62L Acctg/Micro/Lab</td>
<td>0.5</td>
<td>OFF T 250a Beg Typing Part 1</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Other Suggested Courses

BUS 58 Human Relat/Motivat (3), BUS 40 Personal Finance (3); DTA P 52 Intro Microcomputer (1); OFF T 250b Beg Typing Part 2 (1).

"FAST TRACK" CLERK TYPIST CERTIFICATE

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

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Required Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF T 56 Office Procedures</td>
<td>3.0</td>
<td>OFF T 62 Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>OFF T 50ac Beginning Typing</td>
<td>3.0</td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td>OFF T 262 Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>OFF T 250ac Beginning Typing</td>
<td>3.0</td>
<td>OFF T 275 Filing</td>
<td>1.5</td>
</tr>
<tr>
<td>OFF T 250df Intermediate Typing</td>
<td>3.0</td>
<td>BUS 58 Human Relat/Motivat</td>
<td>3.0</td>
</tr>
<tr>
<td>OFF T 260 Spelling Off/Trnees</td>
<td>1.5</td>
<td>DTA P 52 Intro Microcomputers</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Other Suggested Courses

BUS 264 Ten-Key Proficiency (1.5); OFF T 264 "How to" Bus Engl (1.5).
ASSOCIATE DEGREE PROGRAMS

Students are encouraged to continue their training and education beyond the Certificate in Achievement by taking additional technical-related courses and general education courses which may lead to an Associate in Science or Associate in 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>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 53a</td>
<td>3.0</td>
<td>BUS 40</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td>BUS 53</td>
<td>4.0</td>
</tr>
<tr>
<td>ACCTG 53b</td>
<td>3.0</td>
<td>BUS 253</td>
<td>4.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td>BUS 253</td>
<td>4.0</td>
</tr>
<tr>
<td>ACCTG 54</td>
<td>3.0</td>
<td>BUS 58</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td>DTA P 1</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCTG 62</td>
<td></td>
<td>COM S 5</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCTG 62L</td>
<td>0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCTG 64</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCTG 64L</td>
<td>0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS A 10</td>
<td>2.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: BUS A 1a may be substituted for ACCTG 532a or 253a and 53b or 253b.

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>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG</td>
<td>3.0</td>
<td>BUS 58</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCTG</td>
<td>3.0</td>
<td>DTA P 1</td>
<td>3.0</td>
</tr>
<tr>
<td>BNKG 70a</td>
<td>3.0</td>
<td>MGMT 43</td>
<td>3.0</td>
</tr>
<tr>
<td>BNKG 76</td>
<td>3.0</td>
<td>PHIL 14</td>
<td>3.0</td>
</tr>
<tr>
<td>BNKG 78</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 40</td>
<td>3.0</td>
<td></td>
<td></td>
</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.

BUSINESS ADMINISTRATION MAJOR
CALIFORNIA STATE COLLEGE AND UNIVERSITIES

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 in Arts Degree from Bakersfield College.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>UN</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS A 1a Prin of Accounting</td>
<td>4.0</td>
<td>DTA P 1 Intro Data Process</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>BUS A 1b Prin of Accounting</td>
<td>4.0</td>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS A 10 Acctg/Microcomputer</td>
<td>2.0</td>
<td>COM S 5 Intr Prg w/BASIC</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>BUS A 20 Prin/Bus &amp; Industry</td>
<td>3.0</td>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTA P 4 COBOL Prgrm Lang</td>
<td>3.0</td>
<td>COM S 18 Intr Cmp Prg w/FORT</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PHIL 14 Bus/Socl Responsib</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>

Additional courses may be needed depending upon the particular state college or university selected.

REAL ESTATE

Designed to prepare the student for a career in real estate. Job opportunities are in lending institutions doing specialized work in appraising, financing, managing property; in government, in real estate offices as a salesperson or broker (State licensing examination is required).
**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 52</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 53</td>
<td>4.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BUS 253</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS 58</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS A 1a</td>
<td>4.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ACCTG 53a</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ACCTG 53b</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ACCTG 253a</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ACCTG 253b</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**Other Suggested Courses**

- OFF T 50ac Beginning Typing (3)
- BUS 40 Personal Finance (3)
- BUS 55 Survey of Bus Law (3)
- R EST 65 Inc Tax Rl Est Inv (3)
- MGMT 61 Personnel Managemnt (3)
- MGMT 63 Written Communicatn (3)
- BNKG 77c Installment Credit (3)
- BUS A 1b Prin of Accounting (3)

**SECRETARY/WORD PROCESSOR**

**Minimum units required in discipline – 18**

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF T 56</td>
<td>3.0</td>
</tr>
<tr>
<td>OFF T 60a</td>
<td>1.5</td>
</tr>
<tr>
<td>OFF T 60b</td>
<td>1.5</td>
</tr>
<tr>
<td>OR OFF T 66a</td>
<td>1.0</td>
</tr>
<tr>
<td>OR OFF T 66b</td>
<td>1.0</td>
</tr>
<tr>
<td>OR OFF T 66aL Lab</td>
<td>0.5</td>
</tr>
<tr>
<td>OR OFF T 66bL Lab</td>
<td>0.5</td>
</tr>
</tbody>
</table>
Other Suggested Courses

OFF T 20 Elem Gregg Shorthand (4); OFF T 266 Elem Gregg Shorthand (3); OFF T 54 Ltr/Memo Writing (1.5); OFF T 57 Secretarial Acctg (1.5); ACCTG 253 Intro Accounting (3); OFF T 65 Wrd Processng Concep (1.5); OFF T 250g Production Typing (1); OFF T 260 Spelling Off/Tnces (1.5); OFF T 262 Business English (3); OFF T 264 “How to” Bus Engl (1.5); BUS 58 Human Relat/Motivat (3); and BUS 264 Ten-Key Proficiency (1.5)

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: lect lecture; lab laboratory; demo demonstration; Repeat repeatability; CCS Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. NOTE: If repeatability is not shown, course may not be repeated.

ACCOUNTING

ACCTG 53a INTRODUCTION TO ACCOUNTING 1 (3 units)
An introduction to modern financial accounting theory and practice. Analysis of financial transactions using the rules of double-entry bookkeeping. Accounting cycle including adjusting entries, the expanded worksheet, the use of special journals, bank reconciliations, and the preparation of financial statements. Prerequisite: Reading Level 1. BUS 53 or 253 strongly recommended Hours: (54) 3 lect. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Not open to students with credit in ACCTG 253a.

ACCTG 53b INTRODUCTION TO ACCOUNTING 2 (3 units)
A continuation of an introduction to modern financial accounting theory and practice. Analysis of financial transactions peculiar to the partnership and corporate forms of business ownership. Accounting methods and procedures including valuation of inventory, accounts receivable, notes payable, notes receivable and drafts, depreciation, depletion and amortization, capital stock transactions, bonds and other long-term liabilities, worksheets and payroll. Prerequisite: ACCTG 53a or 253a. Hours: (54) 3 lect. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Not open to students with credit in ACCTG 253b.

ACCTG 54 PAYROLL ACCOUNTING (3 units)
A 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 Social Security, Federal Unemployment Insurance, Federal Income Tax and California Income Tax, and how these taxes affect the employee/employer. Prerequisite: ACCTG 53a or 253a. May be taken concurrently with ACCTG 53b, 253b, or 263. Hours: (54) 3 lect. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Not open to students with credit in ACCTG 254.
ACCTG 57 FEDERAL AND CALIFORNIA INCOME TAXES (4 units)
Instruction in Federal and California Income Tax law, theory and practice. Designed to meet 60-hour requirement for registration as a tax preparer, or to serve as a refresher course in current tax laws. Prerequisite: ACCTG 53a or 253a, and 53b or 253b or BUS A 1a or equivalent transfer-level introductory accounting principles course. Reading Level 1. Hours: (72) 4 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

ACCTG 62 INTRODUCTION TO ACCOUNTING ON THE MICROCOMPUTER (1.5 units)
Application of accounting principles and procedures requiring students to maintain general ledger, receivables, payables, payroll, and depreciation records on a microcomputer, and do general financial statements from these records. Prerequisite: ACCTG 53a or ACCTG 253a, ACCTG 53b or ACCTG 253b, or evaluation by instructor. Reading Level 1. Concurrent enrollment in ACCTG 62L. Hours: (27) 3 lect for 9 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.

ACCTG 62L COMPUTER ACCOUNTING LABORATORY (0.5 unit)
Supervised laboratory work for students in computer accounting. Prerequisite: Concurrent enrollment in corresponding accounting course. Reading Level 1. Hours: (27) 3 hours by arrangement for 9 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.

ACCTG 64 APPLICATIONS—ACCOUNTING ON THE MICROCOMPUTER (1.5 units)
Computer bookkeeping simulations including establishing multiple client accounts, maintaining accounting records and using a commercial client accounting software program. Prerequisite: ACCTG 62 or evaluation by instructor. Reading Level 1. Concurrent enrollment in ACCTG 64L. Hours: (27) 3 lect for 9 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.

ACCTG 64L COMPUTER ACCOUNTING LABORATORY (0.5 unit)
Supervised laboratory work for students in computer accounting. Prerequisite: Concurrent enrollment in corresponding accounting course. Reading Level 1. Hours: (27) 3 hours by arrangement for 9 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.

ACCTG 253a INTRODUCTION TO ACCOUNTING 1 (3 units)
An introduction to modern financial accounting theory and practice. Analysis of financial transactions using the rules of double-entry bookkeeping. Accounting cycle, including adjusting entries, the expanded worksheet, the use of special journals, bank reconciliations, and the preparation of financial statements. Prerequisite: Reading Level 1 required. BUS 53 or 253 strongly recommended (may be taken concurrently). Hours: (54) 3 hours individualized instruction and supervised lab. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Not open to students with credit in ACCTG 53a.
ACCTG 253b  INTRODUCTION TO ACCOUNTING 2 (3 units)
A continuation of an introduction to modern financial accounting theory and practice. Analysis of financial transactions peculiar to the partnership and corporate forms of business ownership. Accounting methods and procedures including valuation of inventory, accounts receivable, notes payable, notes receivable and drafts, depreciation, depletion and amortization, capital stock transactions, bonds and other long-term liabilities, worksheets and payroll. **Prerequisite**: ACCTG 53a or 253a. Reading Level 1. **Hours**: (54) 3 hours individualized instruction and supervised lab. **CCS**: Occupational Education. **Not Transferable**: Associate Degree only. **Note**: Not open to students with credit in ACCTG 53b.

ACCTG 254  PAYROLL ACCOUNTING (3 units)
A 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/employer. **Prerequisite**: ACCTG 53a or 253a. Reading Level 1. May be taken concurrently with ACCTG 53b, 253b or 263. **Hours**: (54) 3 hours individualized instruction and supervised lab. **CCS**: Occupational Education. **Not Transferable**: Associate Degree only. **Note**: Not open to students with credit in ACCTG 54.

**BANKING**

BANKG 70a  PRINCIPLES OF BANK OPERATION (3 units)
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. Recommended for Business Administration and Economics majors. **Prerequisite**: Reading Level 1. **Hours**: (54) 3 lect. **CCS**: Occupational Education. **Not Transferable**: Associate Degree only.

BANKG 76  MONEY AND BANKING (3 units)
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. **Prerequisite**: None. **Hours**: (54) 3 lect. **CCS**: Occupational Education. **Not Transferable**: Associate Degree only.

BANKG 77a  AGRICULTURAL FINANCE (3 units)
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. **Prerequisite**: None, but recommended for those employed in lending or farming enterprises. **Hours**: (54) 3 lect. **CCS**: Occupational Education. **Not Transferable**: Associate Degree only.
BANKG 77b CREDIT ADMINISTRATION (3 units)
Provides assistance in preparing bank loans and discounts. Considers the formulation and administration of a sound loan policy, emphasizing the factors to be reviewed in each bank. Careful review is made of the means by which adequate information may be collected and analyzed and the degree of rise approximated. **Prerequisite:** None, but recommended for those employed by banks in credit or lending positions. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BANKG 77c INSTALLMENT CREDIT (3 units)
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. **Prerequisite:** Evaluation by instructor. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BANKG 78 ANALYZING FINANCIAL STATEMENTS (3 units)
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 granters of credit. **Prerequisite:** Evaluation by instructor. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BUSINESS

BUS 40 PERSONAL FINANCE (3 units)
A study of the major economic problems facing the consumer. Principles of income allocation and intelligent consumer choice. Includes consumer credit, insurance, buying real estate, investments, banking services, estate planning, transportation and taxes. Emphasizes the application of the principles studied. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges. **Note:** Formerly BUS 54.

BUS 51 BUSINESS MATHEMATICS (3 units)
A review of basic arithmetic skills to increase proficiency and mastery of such skills in their application to business problems and situations. Emphasizes bank records, invoices, cash and trade discounts, markup and markdown, inventory valuation, payroll, simple and compound interest, promissory notes, installment buying, stocks and bonds, amortization, real estate loans, property tax, personal income tax, depreciation, and insurance. **Prerequisite:** Reading Level 1 and MATH 60 or qualifying score on Basic Math Test. **Hours:** (54) 3 lect/demo. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students with credit in BUS 53 or BUS 253.

BUS 52 TODAY'S BUSINESS WORLD (3 units)
Explores the economics, fundamentals and functions of business and its components; how business is owned, organized, and managed. Includes organization, management, labor relations, decision making and problem solving, marketing, production, financing, business ethics, government regulations and taxation, the legal environment and the labor union. Recommended for all entry-level business career students.
Prerequisite: Reading Level 2. Hours: (54) 3 lect/discussion. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Not open to students with credit in BUS A 20.

BUS 53 BUSINESS MATHEMATICS ON ELECTRONIC CALCULATORS (4 units)
Reviews basic arithmetic skills along with instruction in the use of the 10-key adding machine by touch and all the functions of the electronic calculator. Using machines, complete business functions such as bank records, invoices, cash and trade discounts, markup and markdown, inventory valuation, payroll, simple and compound interest, promissory notes, installment buying, stocks and bonds, amortization, real estate loans, property tax, personal income tax, depreciation and insurance. Prerequisite: Qualifying score on a basic math test administered by business math instructor. Reading Level 1. Hours: (90) 5 lect/demo. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Not open to students with credit in BUS 251 or 253.

BUS 58 HUMAN RELATIONS AND MOTIVATION (3 units)
A behavioral approach to the business environment including self-understanding, motivation techniques as related to the job place, morale, discrimination, leadership techniques, effects of drugs and alcoholism on the individual and work group, career selection and communication skill building. Prerequisite: Reading Level 1. Hours: (54) 3 lect/discussion. CCS: Occupational Education. Not Transferable: Associate Degree only.

BUS 73 INTRODUCTION TO INVESTMENTS (3 units)
An introduction to the principles of investments and money management with an in-depth survey of the stock market. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

BUS 249 COOPERATIVE WORK EXPERIENCE EDUCATION (1–4 units)
College credit for learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Prerequisites: (a) Declared vocational major, (b) concurrent enrollment in seven or more units (including CWEE units), except summer school, (c) minimum 2.00 GPA, or evaluation by instructor. Hours: (75 per semester per credit unit at a paid job, or 60 per semester per credit unit at a non-paid job.) 5 or more per week. Repeat: 3 or until a maximum of 16 units is reached. CCS: Occupational Education. Transferable: CSU and Private Colleges. Credit limitations. For specific information see counselor. Note: Formerly W EXP 49.

BUS 251 BUSINESS MATHEMATICS (3 units)
A review of basic arithmetic skills to increase proficiency and mastery of such skills in their application to business problems and situations. Emphasizes bank records, invoices, cash and trade discounts, markup and markdown, inventory valuation, payroll, simple and compound interest, promissory notes, installment buying, stocks and bonds, amortization, real estate loans, property tax, personal income tax, depreciation, and insurance. Prerequisite: Reading Level 1 and qualifying score on a basic math test administered at the Weill Institute Math Lab. Hours: (54) 3 hours individualized instruction and supervised lab.
BUSINESS EDUCATION

CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Not open to students with credit in BUS 53 or BUS 253.

BUS 253 BUSINESS MATHEMATICS ON ELECTRONIC CALCULATORS (4 units)
A review of basic arithmetic skills to increase proficiency and mastery of such skills in their application to business problems and situations. Students will become proficient in the use of the ten-key by touch, the use of all the functions of the electronic calculator, and master the technique of solving business problems with the aid of the calculator. Emphasizes bank records, invoices, cash and trade discounts, markup and markdown, inventory valuation, payroll, simple and compound interest, promissory notes, installment buying, stocks and bonds, amortization, real estate loans, property tax, personal income tax, depreciation and insurance. Prerequisite: Reading Level 1 and MATH 60 or equivalent, or evaluation by instructor. Hours: (90) 5 hours individualized instruction and supervised lab.
CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Not open to students with credit in BUS 53 or BUS 251.

BUS 264 TEN-KEY PROFICIENCY (1 unit)
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. Prerequisite: Reading Level 2 or evaluation by instructor. Hours: (30) 5 hours individualized instruction and supervised lab for six weeks.
CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Not open to students with credit in BUS 53 or 253.

BUSINESS ADMINISTRATION

BUS A 1a PRINCIPLES OF ACCOUNTING (4 units)
Introduction to accounting theory and practice. First semester presents the recording, analyzing, and summarizing procedures used in preparing balance sheets and income statements. It is recommended that this course be taken in the third or fourth semester at Bakersfield College before transferring. Prerequisites: Reading Level 1. ENGL 2 eligibility or evaluation by instructor. Hours: (72) 4 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

BUS A 1b PRINCIPLES OF ACCOUNTING (4 units)
BUS A 10  ACCOUNTING ON THE MICROCOMPUTER (2 units)
Provides those without computer knowledge an opportunity to gain knowledge of computerized accounting principles. Consists of five major accounting systems commonly found in computerized accounting environments — general ledger, depreciation, accounts receivable, accounts payable, and payroll. Emphasizes “hands-on” experience with a microcomputer used in business and industry. Prerequisite: ACCTG 53a or 253a or equivalent. Reading Level 1. ENGL 1 or evaluation by instructor. Hours: (36) 2 lect/discussion. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

BUS A 18  BUSINESS LAW (3 units)

BUS A 20  PRINCIPLES OF BUSINESS AND INDUSTRY (3 units)
The nature, function and management of the business enterprise in our modern political, social and economic environment. Evaluation of the relationships of business to government, to labor and to the public. Prerequisite: Reading Level 1. English Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

INSURANCE

INSUR 21  PRINCIPLES OF INSURANCE (3 units)
Basic principles of insurance as well as the nature and operation of the insurance business. Principles which underlie the entire field of insurance. 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. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Occupational Education. Transferable: CSU and Private Colleges.

INSUR 22  PROPERTY INSURANCE (3 units)
Property and liability insurance principles. Focuses on property insurance coverage implemented through contracts for property risks. Topics include the standard fire insurance policy, indirect losses, ocean and inland marine, burglary and theft insurance, multiple-line insurance. Specimen forms analyzed to understand provisions which determine protection provisions for various property risks. Equivalent to I.I.A. Course No. 22. Prerequisite: INSUR 21 or evaluation by instructor. Hours: (54) 3 lect. CCS: Occupational Education. Transferable: CSU and Private Colleges.
INSUR 23  CASUALTY INSURANCE (3 units)
Casualty risks and the means by which such hazards may be minimized by insurance. Study 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. Prerequisite: INSUR 21 or evaluation by instructor. Hours: (54) 3 lect. CCS: Occupational Education. Transferable: CSU and Private Colleges.

MANAGEMENT

MGMT 41  ADVANCED PERSONNEL MANAGEMENT (3 units)
Advanced training in the general and social nature of personnel management, such as communications, attitudes, leadership, and motivation. An indepth study of the major activities of personnel management covering work analysis, staffing, training and development, performance appraisal, compensation, maintenance of the work environment, and union relations. Includes a special unit on the role of the personnel manager as a human resource specialist in the "new-age" automated office of today and the future. Prerequisite: Reading Level 1 or evaluation by instructor. Hours: (54) 3 lect/discussion. CCS: Occupational Education. Transferable: CSU and Private Colleges.

MGMT 43  PRINCIPLES OF ORGANIZATION AND MANAGEMENT (3 units)
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, individual behavior, planning theory, systems management and non-formal behavior. Prerequisite: Reading Level 1 or evaluation by instructor. Hours: (54) 3 lect/discussion. CCS: Occupational Education. Transferable: CSU and Private Colleges.

MGMT 45  ADVANCED STUDY OF PUBLIC ADMINISTRATION (3 units)
An advanced study of the historical and contemporary status of administrative institutions, principles and practices of public administration and the process of public management. Includes the process of public policy-formulation, governmental planning and programming and administrative decision-making. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Occupational Education. Transferable: CSU and Private Colleges.

MGMT 60a  INTRODUCTION TO SUPERVISORY TRAINING (1 unit)
An introduction to current methods of supervision. Emphasizes developing the techniques and skills required to promote harmony and productivity within the organization. Trains 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. Prerequisite: Reading Level 1 or evaluation by instructor. Hours: (18) 3 lect/discussion for 6 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.
MGMT 60b  ADVANCED SUPERVISORY TRAINING (1 unit)
An advanced course for training supervisors to become management oriented. Develops 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 management skills. Prerequisite: MGMT 60a or equivalent or evaluation by instructor. Reading Level 1. Hours: (18) 3 lect/discussion for 6 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.

MGMT 61  PERSONNEL MANAGEMENT (1.5 units)
A review of essential personnel management concepts and techniques. Topics include recruitment and placement, training and development, compensation and motivation, performance appraisals, and the legal environment of personnel. Prerequisite: Reading Level 1 or evaluation by instructor. Hours: (27) 3 lect/discussion for 9 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.

MGMT 63  ADVANCED WRITTEN COMMUNICATIONS (3 units)
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. Prerequisite: Reading Level 1 or evaluation by instructor. Hours: (54) 3 lect/discussion. CCS: Occupational Education. Not Transferable: Associate Degree only.

MGMT 65a  BASIC PRINCIPLES OF ENGLISH FOR BUSINESS/PUBLIC ORGANIZATIONS (1 unit)
A review of basic principles of English as they apply to today’s business office. Prerequisite: Reading Level 1 or evaluation by instructor. Hours: (18) 3 lect/discussion for 6 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.

MGMT 65b  PRINCIPLES OF WRITING FOR BUSINESS/PUBLIC ORGANIZATIONS (1 unit)
Comprehensive review of the techniques involved in writing business letters, memos, and reports. Prerequisite: MGMT 65a; Reading Level 1 or evaluation by instructor. Hours: (18) 3 lect/discussion for 6 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.

MGMT 65c  ORGANIZATIONAL COMMUNICATIONS (1 unit)
An examination of the processes of human behavior and communication within the organizational context of a reflection of the dynamic, all-encompassing role of communication in the operation of organizations. Topics include the role of communication in organizations, communication styles, the relationship between verbal and nonverbal behaviors, barriers to effective communication, identification of channels of communication within an organization, small-group communication, conflict and communication. Prerequisite: Reading Level 1 or evaluation by instructor. Hours: (18) 3 lect/discussion for 6 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.
MGMT 66  CASE STUDIES IN MANAGEMENT (1 unit)
Provides an opportunity to think about managerial problems, make decisions, interview managers, and participate in discussions on various management problems utilizing the case method. Prerequisite: Reading Level 1 or evaluation by instructor. This is the last course of the Management/Public Administration Certificate of Achievement series. It must be taken as the last course or concurrently with the last units for the certificate. Hours: (18) 3 lect/discussion for 6 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.

MGMT 70  TOPICS IN MANAGEMENT (0.5 unit each)
Workshops or seminars related to special topics of interest and concern to managers in both the private and public sectors. Prerequisite: Reading Level 1. Hours: (9) 3 lect for 3 weeks. Repeat: 2. CCS: Occupational Education. Not Transferable: Associate Degree only.

MGMT 70a  BUSINESS ENVIRONMENT
MGMT 70b  MANAGEMENT AND ORGANIZATIONAL ISSUES
MGMT 70c  PEOPLE AND PRODUCTIVITY
MGMT 70d  FINANCIAL AND RISK MANAGEMENT ISSUES
MGMT 70e  MARKETING
MGMT 70f  GOVERNMENT AND BUSINESS
MGMT 70g  SMALL BUSINESS AND ENTREPRENEURSHIP
MGMT 70h  PERSONAL CAREER DEVELOPMENT
MGMT 70i  LEGAL ENVIRONMENTS OF BUSINESS
MGMT 70j  MANAGEMENT INFORMATION SYSTEMS AND COMPUTERS

MGMT 71  LEADERSHIP AND MANAGEMENT TRAINING (1.5 units)
Basic leadership training with emphasis on student participation using practical class projects. Defines, discusses problems of and preparation for leadership. Prerequisite: Reading Level 1 or evaluation by instructor. Hours: (27) 3 lect/discussion for 9 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.

MGMT 72  INTRODUCTION TO MANAGEMENT PRACTICES (1.5 units)
A survey of basic management concepts, theories, and practices. Emphasizes a uniquely practical orientation focusing on what managers do, how they do it, and what factors determine whether or not they will be successful. Prerequisite: Reading Level 1 or evaluation by instructor. Hours: (27) 3 lect/discussion for 9 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.

MGMT 73  IMPROVING PRODUCTIVITY AT WORK: EMPLOYEE PERFORMANCE AND MOTIVATION (1.5 units)
An examination of the latest and most effective behavioral management tools that can be implemented to improve productivity, while keeping costs to a minimum. Emphasizes
logical and realistic methods for assessing employee strengths and weaknesses and practical productivity-boosting techniques. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (27) 3 lect/discussion for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**MGMT 74 LABOR RELATIONS (1.5 units)**
An examination of the historical development of the labor movement, the structure of union organizations, and federal agencies involved in labor relations in both the public and private sectors; and the processes of collective bargaining, including the identification of bargaining issues, negotiations, and contract administration. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (27) 3 lect/discussion for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**MGMT 76 MANAGEMENT OF CHANGE AND CONFLICT (1.5 units)**
A study of new methods for producing and responding to change. Techniques and methods presented are necessary to meet the challenge of high technology and an unpredictable economy. Topics covered include how to diagnose both the behavioral problems of an individual and the organizational needs. **Prerequisite:** MGMT 60a and MGMT 60b. Reading Level 1 or evaluation by instructor. **Hours:** (27) 3 lect/discussion for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**MGMT 77 FUNDAMENTALS OF PUBLIC ADMINISTRATION (1.5 units)**
How government agencies are formed, what their chains of command are, and how they work. Emphasizes the changing world of public administration, its financial resources, leadership and management functions, human resource issues, program evaluation and ethical concerns. **Prerequisite:** Reading Level 2. **Hours:** (27) 3 lect/discussion for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**MARKETING**

**MKTG 1 FUNDAMENTALS OF MARKETING (3 units)**
An introduction emphasizing key concepts and issues underlying the modern practice of marketing. Surveys the general nature of marketing, markets, the marketing concept, process and organization, and buyer behavior. **Prerequisite:** Sophomore standing recommended. Reading Level 1 or evaluation by instructor. **Hours:** (54) 3 lect/discussion. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

**MKTG 53a FUNDAMENTALS OF RETAILING (3 units)**
Examines job opportunities in the field of goods and services and their allied occupations. Stresses obtaining a job and keeping it, personality development, selling, merchandising, promotions, merchandise analysis, store mathematics, effective oral expression, and human relations. The business community is used as a laboratory to illustrate the latest methods and techniques in the fields of retailing, marketing, and distribution. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (54) 3 lect/discussion. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
MKTG 53b  FUNDAMENTALS OF RETAILING (3 units)
The latest techniques in the field of fabrics, styles for men and women, plastics, furniture, super markets, shoes, and other merchandise which provides sufficient background to become a salesman, buyer or an intelligent consumer. Field trips, window displays, and speaker demonstrations enhance merchandise analysis. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (54) 3 lect/discussion. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MKTG 62  FUNDAMENTALS OF PERSONAL SELLING (3 units)
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. Emphasizes the development of poise, improvement in personality and stimulation of confidence through training in the speech aspects of selling. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (54) 3 lect/discussion. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MKTG 64  FUNDAMENTALS OF ADVERTISING (3 units)
A survey of the field of advertising, its uses and its economic implications. 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. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (54) 3 lect/discussion. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

OFFICE TRAINING

OFF T 20  ELEMENTARY GREGG SHORTHAND (4 units)
A beginning 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. **Prerequisite:** Concurrent enrollment in typing is required unless OFF T 250g has been completed. English Level 2; Reading Level 1. **Hours:** (126) 5 lect, 2 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges. **Note:** Not open to students with credit in OFF T 266.

OFF T 50ac  BEGINNING TYPING (3 units)
Develops the keyboard by touch and a knowledge of all operational parts of the typewriter. Instruction in centering, letter placement, simple tabulation, manuscripts and rough drafts. **Prerequisite:** English Level 2; Reading Level 1 or evaluation by instructor. **Hours:** (90) 5 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges. **Note:** Not open to students with credit in OFF T 250bc. Formerly OFF T 50a.0

OFF T 50df  INTERMEDIATE TYPING (3 units)
Designed to develop greater typing speed and accuracy and to type a variety of business office problems including business letters, reports, memorandums, tabulations, and forms. **Prerequisite:** OFF T 50ac or 250bc with a grade of "C" or minimum typing placement test score of 35 NWAM. Reading Level 1, English Level 2, or
evaluation by instructor. **Hours:** (90) 5 lect/lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students with credit in OFF T 250df. Formerly OFF T 50b.

**OFF T 54 ** **BASIC LETTER AND MEMO WRITING** **(1.5 units)**  
Basics of writing effective business letters and memos. **Prerequisite:** English Level 2 or evaluation by instructor. **Hours:** (27) 3 lect for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly OFF T 10.

**OFF T 56 ** **OFFICE PROCEDURES** **(3 units)**  
Provides advanced training in specialized secretarial duties such as telephone and telegraphic services; incoming and outgoing mail procedures; selection of office supplies and equipment; banking services; reprographic methods and processes; travel arrangements for executives; keeping appointment calendars and arranging meetings; job attitudes; resumes, application letters and interview techniques. **Prerequisite:** Completion of OFF T 250b. English Level 2; Reading Level 1. **Hours:** (54) 3 lect/discussion. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**OFF T 58 ** **MANAGEMENT SKILLS FOR SECRETARIES** **(1.5 units)**  
Managerial skills for secretaries including thinking and acting like a manager: dimensions of managing; basic leadership styles; increasing value, credibility, and responsibility; image projection and polishing; decision making; and time management. **Prerequisite:** English Level 2, Reading Level 1, or evaluation by instructor. **Hours:** (27) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**OFF T 60a ** **INTRODUCTION TO DECIMATE WORDPROCESSING** **(1.5 units)**  
Basic operational functions of a CRT display screen, word processing system. Develops competency in creating, editing, merging, storing, and printing of letters, tables and reports. **Prerequisite:** English Level 2, 30 NWPM typing speed, ability to correctly format letters, memos, and business reports, or completion of OFF T 250c. **Hours:** (36) 4 lab for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**OFF T 60b ** **ADVANCED DECIMATE WORD PROCESSING** **(1.5 units)**  
Advanced operational functions of a CRT display screen, word processing system. Develops competency in advanced editing, merging, transferring information from one disk to another and using the list and sort features. **Prerequisite:** OFF T 60a. **Hours:** (36) 4 lab for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**OFF T 62 ** **BUSINESS ENGLISH** **(3 units)**  
Basic English usage for business correspondence including punctuation, capitalization, number usage, plurals, possessives, troublesome words, and grammar. **Prerequisite:** OFF T 50ac or 250c, or one year of high school typing. ENGL 60 with a grade of "C" or eligibility for English Level 2; Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students with credit in OFF T 262.
OFF T 65 WORD PROCESSING CONCEPTS (3 units)
A study of the modern word/information processing and administrative support concepts in the organization, operation, and control of office functions. Emphasizes the secretary's dual role as an administrative assistant or as a correspondence secretary. Includes the role of management and career opportunities in the word processing field. Prerequisite: English Level 2; Reading Level 1. Hours: (27) 3 lect for 9 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.

OFF T 66a INTRODUCTION TO WORDPERFECT (1 unit)
Enables the student to use the WordPerfect 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. Prerequisite: Some knowledge of microcomputer operations recommended. Concurrent enrollment in OFF T 66aL. Hours: (18) 3 lect for 6 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Not open to students with credit in DTA P 66a.

OFF T 66aL INTRODUCTION TO WORDPERFECT LAB (0.5 units)
Lab portion of Introduction to WordPerfect. Prerequisite: Concurrent enrollment in OFF T 66a. Hours: (27) By arrangement. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Not open to students with credit in DTA P 66aL.

OFF T 66b ADVANCED WORDPERFECT (1 unit)
An understanding of the advanced capabilities of the WordPerfect Word Processing Microcomputer Program. Students will have the opportunity to work with the program and learn how to incorporate advanced features. Prerequisite: OFF T 66a, or evaluation by instructor. English Level 2. Concurrent enrollment in OFF T 66bL. Hours: (18) 3 lect for 6 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Not open to students with credit in DTA P 66bL.

OFF T 66bL ADVANCED WORDPERFECT LAB (0.5 unit)
Lab portion of Advanced WordPerfect. Prerequisite: Concurrent enrollment in OFF T 66b. Hours: (27) By arrangement. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Not open to students with credit in DTA P 66bL.

OFF T 73 LEGAL MACHINE TRANSCRIPTION (1.5 units)
Designed to develop understanding of legal terminology and skill in transcribing legal correspondence, contracts, agreements, etc. Prerequisite: OFF T 74a and 277 with a grade of "C." Hours: (27) 3 hours individualized instruction for 9 weeks by arrangement with instructor. CCS: Occupational Education. Not Transferable: Associate Degree only.

OFF T 74 LEGAL OFFICE PROCEDURES (3 units)
Designed to explore the various aspects of the job of a legal secretary. Noncourt forms and documents, legal filing procedures, and legal office record keeping. Develops knowledge and usage of legal terminology. Prerequisite: Completion of or concurrent enrollment in BUS 55 and OFF T 250d or BUS A 18. English Level 2. Hours: (54) 3 individualized instruction by arrangement. CCS: Occupational Education. Not Transferable: Associate Degree only.
OFF T 75  FILING (1.5 units)
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. **Prerequisite:** English Level 3. **Hours:** (27) 3 lect for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students with credit in OFF T 275.

OFF T 250abc  BEGINNING TYPING, PART 1-2-3 (1-1-1 unit)
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 part completed will be assigned a letter grade and one unit of credit. **Prerequisites:** OFF T 250a, Part 1: English Level 3; OFF T 250b, Part 2: OFF T 250a, Part 1 with a grade of “C”; OFF T 250a, Part 3: OFF T 250b, Part 2 with a grade of “C.” **Hours:** (90) 5 hours, for 6 weeks per part, individualized instruction and supervised lab. Open entry/open exit. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students with credit in OFF T 50df. Formerly OFF T 250a.

OFF T 250def  INTERMEDIATE TYPING, PART 1-2-3 (1-1-1 unit)
Intermediate level individualized typewriting instruction to develop speed and accuracy and learn to type the various styles of business letters, business forms and reports, telegrams, memorandums, tabulations and manuscripts. Each part completed will be assigned a letter grade and one unit of credit. **Prerequisite:** OFF T 250d, Part 1: OFF T 250c, Part 3, with a grade of “C” OR minimum typing placement test score of 35 NWAM OR completion of OFF T 50ac; OFF T 250e, Part 2: OFF T 250d, Part 1, with a grade of “C”; OFF T 250f, Part 3: OFF T 250c, Part 2, with a grade of “C,” English Level 2 and Reading Level 1. **Hours:** (90) 5 hours, for 6 weeks per part, individualized instruction and supervised lab. Open entry/open exit. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only **Note:** Not open to students with credit in OFF T 50df. Formerly OFF T 250b.

OFF T 250g  PRODUCTION TYPING (1 unit)
Advanced office simulation for students desiring employment competency. Decision-making skills to correctly format a variety of unarranged, heavily edited documents including letters, reports, memos, minutes, news releases, tables, and rosters. **Prerequisites:** OFF T 250f, Part 3, with a grade of “C” OR a minimum typing placement test score of 45 NWAM and knowledge of proper formatting. English Level 2, Reading Level 1. **Hours:** (30) 5 hours individualized instruction and supervised lab for 6 weeks by arrangement. Open entry/open exit. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. Formerly OFF T 250c

OFF T 251  TYPING SPEED BUILDING (0.5 unit)
Individualized instruction designed to increase typing speed. **Prerequisite:** Minimum typing placement score of 30 NWAM. **Hours:** (12) 12 hours by arrangement in supervised lab. Open entry/open exit. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.
OFF T 260  SPELLING FOR OFFICE TRAINEES (1.5 units)
Designed to review, illustrate and apply the basic spelling rules necessary to become a competent speller in a business office. **Prerequisite:** OFF T 250a, Reading Level 1, English Level 3. **Hours:** (27) 3 hours individualized instruction and supervised lab for 9 weeks. Open entry/open exit. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

OFF T 262  BUSINESS ENGLISH (3 units)
Using realistic business correspondence, applies basic English grammar including punctuation, capitalization, number usage, plurals, possessives and troublesome words. **Prerequisite:** OFF T 50ac or 250c, or one year of high school typing. Completion of ENGL 60 with a grade of "C" or English Level 2, Reading Level 1. **Hours:** (54) 3 hours individualized instruction and supervised lab. Open entry/open exit. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students with credit in OFF T 62.

OFF T 264  A "HOW TO" OF BUSINESS ENGLISH (1.5 units)
A "finishing" course in business English designed to prepare the student for employment. Instruction in use of reference manual; basic English grammar including punctuation, capitalization, number usage, plurals, possessives, spelling and troublesome words; and other aspects of style that apply in all written communications. **Prerequisite:** OFF T 62 or 262 with a grade of "C" or evaluation by instructor; Reading Level 1; English Level 2. **Hours:** (27) 3 hours individualized instruction and supervised lab for 9 weeks. Open entry/open exit. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

OFF T 266  BEGINNING GREGG SHORTHAND THEORY (3 units)
A beginning study of Gregg Shorthand theory with dictation and transcription practice. **Prerequisite:** Minimum typing speed of 30 WAM accurately; English Level 2; Reading Level 1. **Hours:** (90) 5 hours individualized instruction and supervised lab. Open entry/open exit. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students with credit in OFF T 20.

OFF T 268a  GREGG SHORTHAND
DICTATION AND TRANSCRIPTION (3 units)
A review of Gregg shorthand theory with practice in dictation and transcription. Dictation speeds range from 50-80 words a minute. Grammar, punctuation, spelling and business vocabulary will be stressed. Dictation will be taken from specially prepared tapes designed to improve the student's shorthand skill. **Prerequisite:** OFF T 20 or 266 with a grade of "C," OR ability to transcribe materials dictated at 50 words a minute with 95 percent accuracy, and type at least 30 WAM accurately. English Level 2; Reading Level 1. **Hours:** (90) 5 hours individualized instruction and supervised lab. Open entry/open exit. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
OFF T 268b  GREGG SHORTHAND
DICTATION AND TRANSCRIPTION (3 units)
A review of Gregg shorthand theory with practice in dictation and transcription. Dicta-
tion speeds range from 70 to 100 words a minute. Grammar, punctuation, spelling,
and business vocabulary will be stressed. Dictation will be taken from specially
prepared tapes designed to improve the student’s shorthand skill. Prerequi-
sites: Completion of OFF T 268a with a “C.” Ability to type at least 30 words per minute ac-
curately. Ability to transcribe at the typewriter material dictated at 60 words per minute
with 95% accuracy. English Level 2; Reading Level 1. Hours: (90) 5 hours in-
dividualized instruction and supervised lab. Open entry/open exit. CCS: Occupa-
tional Education. Not Transferable: Associate Degree only.

OFF T 275  FILING (1.5 units)
Fundamentals, rules, and procedures common to basic systems of filing. Filing labora-
tory materials provide instruction and practice in alphabetic, numeric, geographic, and
subject filing. Prerequisite: English Level 3. Hours: (27) 3 hours individualized in-
duction and supervised lab for 9 weeks. Open entry/open exit. CCS: Occupational
Education. Not Transferable: Associate Degree only. Note: Not open to students
with credit in OFF T 75.

OFF T 277  MACHINE TRANSCRIPTION (1.5 units)
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. Emphasizes English usage, punctuation and spelling techniques. Pre-
requisite: OFF T 250f with a grade of “C”; OFF T 62 or 262 with a grade of “C” or
English Level 2 or evaluation by instructor. Completion of or concurrent enrollment in
OFF T 250g is highly recommended. Hours: (27) 3 hours individualized instruction
and supervised lab for 9 weeks. Open entry/open exit. CCS: Occupational Educa-
tion. Not Transferable: Associate Degree only.

REAL ESTATE

REST 39  PRINCIPLES OF REAL ESTATE (3 units)
Fundamentals of real estate practice with emphasis on principles rather than on sales
techniques. The real estate business, liens, taxes, bonds, contracts, leases, deeds, and
other real estate instruments are studies in conjunction with brokerage and home own-
ership. Although the approach is directed principally from the pont of view of the con-
sumer, the student is thoroughly oriented to the vocational aspects of the field.
Satisfies partial educational requirement of state sales and broker’s license. Prerequi-
site: Reading Level 1. Hours: (54) 3 lect/discussion. CCS: Occupational Educa-
tion. Transferable: CSU and Private Colleges.
R EST 55 ESCROW PROCEDURES I (3 units)
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. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect/discussion. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

R EST 56 ESCROW PROCEDURES II (3 units)
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. **Prerequisite:** R EST 55 or evaluation by instructor. **Hours:** (54) 3 lect/discussion. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

R EST 57 PROPERTY MANAGEMENT (3 units)
Introduces property management as a specialized activity that offers services to property owners. Contains current, specific information on the real estate market, inflation, and government activities. Detailed emphasis is given to the management of residential property, condominiums, office buildings, and shopping centers. Satisfies partial requirement of state sales and broker license. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

R EST 60 LEGAL ASPECTS OF REAL ESTATE (3 units)
A study of California real estate law, including rights incident to property ownership and management, agency, contracts and application to real estate transfer, conveyancing, probate proceedings, trust deeds and foreclosures, as well as recent legislation governing real estate transactions. Satisfies partial educational requirement of State broker’s examination. **Prerequisite:** R EST 39 recommended. **Hours:** (54) 3 lect/discussion. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

R EST 61 REAL ESTATE ECONOMICS (3 units)
An advanced course dealing with the nature and classification of land; business fluctuations 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. **Prerequisite:** R EST 39 recommended. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

R EST 62 REAL ESTATE FINANCE (3 units)
Practical study and analysis of real estate financing, with actual cases illustrating lending policies, problems, risks involved in financing transactions in residential, apartment, commercial, and special purpose properties. Satisfies partial educational requirement for State broker’s examination. **Prerequisite:** R EST 39 recommended. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
REST 63 REAL ESTATE APPRAISAL (3 units)
Principles and basic fundamentals of real estate appraisal pertaining primarily to single-family and small multiple dwellings. Explains the appraisal process and the different approaches, methods, and techniques used to determine the value of various types of property. Satisfies partial educational requirement for State broker's examination. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

REST 64 REAL ESTATE PRACTICE (3 units)
Basic elements of day-to-day real estate sales and brokerage practice, primarily for holders of real estate licenses as salesmen and brokers. Topics include listing, prospecting, advertising, financing, sales techniques, escrow and ethics. Satisfies partial educational requirement for State broker's examination. **Prerequisite:** Real estate license or REST 39 recommended. Reading Level 1 or evaluation by instructor. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

REST 65 INCOME TAX ASPECTS OF REAL ESTATE INVESTMENT (3 units)
A comprehensive introduction for real estate investors, salespersons and developers to the tax principles governing the operation of business real estate. By means of practical examples, illustrations and workshop problems, real estate transactions are examined in light of their tax implications, with emphasis on tax benefits arising from ownership in real estate. Pertinent tax law revisions are analyzed. **Prerequisite:** Some previous knowledge of taxes and/or evaluation by instructor, one year of accounting. REST 39, 60 and 64 recommended. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

REST 68 ADVANCED REAL ESTATE APPRAISAL (3 units)
Deals with the principles of appraisal, the appraisal process, features of appraisal, property 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 appraisal of a local apartment complex illustrating all of the factors involved in the appraisal process. Satisfies partial educational requirement of State broker's examination. **Prerequisite:** REST 63 with a grade of "C" or evaluation by instructor. **Hours:** (54) 3 lect. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

REST 70 TOPICS IN REAL ESTATE (1 unit)
Workshop and seminar related to special topics of interest and concern to the real estate industry. Features panels of specialists or individual speakers. **Prerequisite:** Reading Level 1. **Hours:** (18) 18 hours per unit. **Repeat:** as indicated. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

REST 70a SALESPEOPLE/BROKER PRELICENSE PREPARATION
**Repeat:** 3.

REST 70b FINANCING ISSUES
SMALL BUSINESS

SM BS 54  HOW TO START YOUR OWN SMALL BUSINESS (1.5 units)
A basic “how-to” course designed for those men and women who some day may go into business for themselves or manage a small business. Also designed for those who are already in business for themselves but wish to strengthen their entrepreneurial skills. Topics include advantages and disadvantages of going into business for oneself; how to value a business opportunity; writing a business plan, and marketing and financial controls; legal and insurance aspects of small business management and ownership. Satisfies one of the requirements for a certificate from the U.S. Small Business Administration. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (27) 3 lect/disc for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly MGMT 54.

SM BS 55  FINANCING A SMALL BUSINESS (0.5 unit)
Designed to provide practical knowledge of how to set up internal financial systems to provide small business control and to supply financial information to locate and obtain appropriate forms of capital and/or debt if needed. Satisfies one of the requirements for a certificate from the U.S. Small Business Administration. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (9) 3 lect/disc for 3 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly MGMT 55.

SM BS 56  MARKETING A SMALL BUSINESS (1 unit)
Designed to provide an understanding of the importance of marketing in the success of a small business. Provides a close examination of elements in a marketing plan. Reviews the components of the marketing mix-product, price, promotion, distribution, and people as they relate to the overall business strategy. Marketing principles discussed are applicable to retail, service, and wholesale businesses and to professionals. Satisfies one of the requirements for a certificate from the U.S. Small Business Administration. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (18) 3 lect/disc for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly MGMT 56.

SM BS 60  HOW TO USE A BOOKKEEPING SYSTEM (2 units)
Accounting systems, analyzing transactions into credit and debit, journalize and post business transactions. Includes adjusting entries on a worksheet and complete end-of-fiscal-period work for a service business organized as a proprietorship, a merchandising business organized as a partnership, and a merchandising business organized as a corporation. Co-sponsored by the U.S. Small Business Administration. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (36) 3 lect/discussion for 12 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
SM BS 71  HOW TO PROJECT AND IMPROVE CASH FLOW (0.5 unit)
How cash is tracked through the business to promote cash balance at specific intervals.
Co-sponsored by the U.S. Small Business Administration. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (9) 3 lect/disc for 3 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

SM BS 72  UNDERSTANDING TAXES (0.5 unit)
Tax responsibilities and effective record keeping for tax returns including the forms used at federal and state levels. Co-sponsored by the U.S. Small Business Administration. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (9) 3 lect/disc for 3 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

SM BS 73  HOW TO ESTABLISH YOUR ADVERTISING BUDGET (0.5 unit)
How much advertising should cost and how that amount should be allocated. Co-sponsored by the U.S. Small Business Administration. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (9) 3 lect/disc for 3 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

SM BS 74  HOW TO MANAGE CREDIT AND COLLECTIONS (0.5 unit)
How to manage customer credit and collection policies and procedures. Co-sponsored by the U.S. Small Business Administration. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** 3 lect/disc for 3 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
COMMUNICATIONS
Broadcasting
Communications
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.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRDCS 1a Surv Radio Brdcstng</td>
<td>3.0</td>
</tr>
<tr>
<td>BRDCS 2 Radio Production</td>
<td>3.0</td>
</tr>
<tr>
<td>BRDCS 3 TV News Wrtg/Prdctn</td>
<td>3.0</td>
</tr>
<tr>
<td>BRDCS 27a Radio Stat Operat</td>
<td>2.0</td>
</tr>
<tr>
<td>BRDCS 27b Rad News Production</td>
<td>2.0</td>
</tr>
<tr>
<td>BRDCS 1b Surv TV Brdcasting</td>
<td>3.0</td>
</tr>
</tbody>
</table>

JOURNALISM

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

Minimum units required in related disciplines — 22
### COMMUNICATIONS

#### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRNL 1</td>
<td>Communc/Mass Media 3.0</td>
</tr>
<tr>
<td>JRNL 2a</td>
<td>Intr Newspaper Jrnl 3.0</td>
</tr>
<tr>
<td>JRNL 27a</td>
<td>Newsrm Operations 2-2.0</td>
</tr>
<tr>
<td>OR</td>
<td>JRNL 27b Magazine Productn 2-2.0</td>
</tr>
<tr>
<td>OR</td>
<td>JRNL 27e Publicatn Photo Lab 2-2.0</td>
</tr>
<tr>
<td>JRNL 2b</td>
<td>Adv Newspaper Jrnl 3.0</td>
</tr>
</tbody>
</table>

**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>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP ED 11</td>
<td>Beginning Ameslan 3.0</td>
</tr>
<tr>
<td>SP ED 12</td>
<td>Intermed Ameslan 3.0</td>
</tr>
<tr>
<td>SP ED 13</td>
<td>Advanced Ameslan 3.0</td>
</tr>
<tr>
<td>SP ED 63</td>
<td>Interpreting Ameslan 3.0</td>
</tr>
<tr>
<td>SP ED 65</td>
<td>Sign and Song 3.0</td>
</tr>
<tr>
<td>SP ED 54</td>
<td>Fingerspelling 1.5</td>
</tr>
</tbody>
</table>

**SPEECH**

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

**Minimum units required in related disciplines — 25**

#### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH 1</td>
<td>Speech Communicatn 3.0</td>
</tr>
<tr>
<td>SPCH 2</td>
<td>Living Communicatn 3.0</td>
</tr>
<tr>
<td>SPCH 5</td>
<td>Argumentatn/Debate 3.0</td>
</tr>
<tr>
<td>SPCH 18</td>
<td>Voice and Diction 3.0</td>
</tr>
<tr>
<td>SPCH 27*</td>
<td>Intrcl Spch Compet 2.0</td>
</tr>
</tbody>
</table>

*SPCH 27 may be taken four times for a total of no more than 8 units.*
COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: lect lecture; lab laboratory; demo demonstration; Repeat repeatability; CCS Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. NOTE: If repeatability is not shown, course may not be repeated.

BROADCASTING

BRDCS 1a SURVEY OF RADIO BROADCASTING (3 units)
A survey of the radio broadcast industry emphasizing its historical development, social importance and basic production techniques. Prerequisite: English Level 1; Reading Level 1. Hours: (54) 3 lect. Field trips required. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges. Credit limitations. For specific information see counselor.

BRDCS 1b SURVEY OF TELEVISION BROADCASTING (3 units)
A survey of the television broadcast industry emphasizing its historical development, social importance, and basic production techniques. Prerequisite: English Level 1; Reading Level 1. Hours: (54) 3 lect. Field trips required. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges. Credit limitations. For specific information see counselor.

BRDCS 2 RADIO PRODUCTION (3 units)
An introduction to current radio production theories. Emphasizes programming, sales, and components of electronic production. Discusses complexities of modern radio broadcasting. Prerequisite: English Level 1; Reading Level 1. Hours: (54) 3 lect. Field trips required. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

BRDCS 3 TV NEWS: WRITING AND PRODUCTION (3 units)
A survey of the field of television, newswriting and production, giving theoretical and practical experiences in writing, taping, editing and broadcasting television news. Prerequisite: English Level 1; Reading Level 1. Hours: (54) 3 lect/studio. Field trips required. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

BRDCS 27a RADIO STATION OPERATION (1–3 units. Limit of 8 units.)
A laboratory experience in the various phases of radio station operation, including on-the-air studio operation, tape recording, editing and scriptwriting (except newswriting), while assisting in the operations of KBCC-FM, the campus radio station. Prerequisite: BRDCS 2 (may be taken concurrently); Reading Level 1, English Level 1, or evaluation by instructor. Hours: (54-162) 3-6-9 hours lab by arrangement. Repeat: 2 or until a maximum of 8 units is reached. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.
COMMUNICATIONS 147

BRDCS 27b  RADIO NEWS: WRITING AND PRODUCTION
(1–2 units. Limit of 4 units)
A laboratory experience in radio newswriting and production, including writing, interviewing, taping, editing, re-writing teletype copy and on-the-air news broadcasting over KBCC-FM, the campus radio station. Prerequisite: BRDCS 2 (may be taken concurrently). English Level 1; Reading Level 1 or evaluation by instructor. Hours: (54-90) 1 unit: 1 lect, 2 lab by arrangement; 2 units: 1 lect, 4 lab by arrangement. Repeat: 2 or until a limit of 4 units is reached. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

COMMUNICATIONS

CMMN 249  COOPERATIVE WORK EXPERIENCE (1–4 units)
College credit for learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Prerequisites: (a) Declared vocational major, (b) concurrent summer school, (c) minimum 2.00 GPA, or approval by instructor. Hours: 5 or more per week. (75 hours per semester per credit unit at a paid job, or 60 hours per semester per credit unit at a non-paid job.) CCS: Occupational Education. Transferable: CSU and Private Colleges. Credit Limitations. For specific information see counselor. Note: Formerly W EXP 49.

JOURNALISM

JRNL 1  SURVEY OF THE MASS MEDIA (3 units)
An introduction to mass communication through the study of mass media and media technology. Includes a survey of media functions, responsibilities and practices, as well as a study of media history, development, influences on society and potential for the future. Prerequisite: English Level 1; Reading Level 1. Hours: (54) 3 lect/discussion. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

JRNL 2a  BEGINNING REPORTING (3 units)
An introduction to the field of journalism through the study of information gathering and reporting techniques. Concentration on research, investigation, interviewing, reporting and writing, demonstrated by mastering basic writing skills applicable in the mass media. Emphasizes news, feature, sports and persuasion writing. Prerequisite: English Level 1; Reading Level 1. Hours: (54) 3 lect/discussion. Field trips required. CCS: Occupational Education. Transferable: UC, CSU and Private Colleges.

JRNL 4  INTRODUCTION TO PUBLIC RELATIONS (3 units)
An introduction to public relations in today's society. Includes a survey of the origins of public relations and a study of the definitions, processes, and audiences of public relations. Specifics will include public relations in businesses, as well as associations, volunteer agencies and educational institutions. Includes how to write, prepare and submit release to video/audio and print media. Prerequisite: JRNL 2a. Hours: (54) 3 lect/discussion. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.
JRNL 15 PRESS PHOTOGRAPHY (3 units)
Study and application of photography as applied to journalism. Practical problems in photo-journalism for news reporting, sports publicity, feature articles and public relations; emphasizes the use of press camera, together with practice in pertinent darkroom techniques. Emphasizes photography for publication. **Prerequisite:** English Level 1; Reading Level 1. **Hours:** (90) 2 lect/discussion, 3 supervised lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

JRNL 26 PUBLICATION MANAGEMENT (1 unit)
Discusses with the publication advisor(s) content planning and evaluation, art, page, design, ethics and policy. Designed for editors of the campus newspaper and magazine. **Prerequisite:** JRNL 2a. Concurrent enrollment in JRNL 27a. **Hours:** (18) 1 lect. **Repeat:** 3. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

JRNL 27a NEWSPAPER PRODUCTION (2 units)
A production practicum for the college weekly newspaper offering experience in reporting, headline writing, copy editing, proof reading, layout procedures and computer use. All students on the newspaper major staff should be enrolled. **Prerequisite:** JRNL 2a. **Hours:** (72) 2 lect, 3 lab. **Repeat:** 3. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

JRNL 27e PHOTOGRAPHY LABORATORY FOR CAMPUS PUBLICATIONS (2 units)
A production practicum for student publications, offering experience in taking photographs, editing and sizing, and photo essay design. Qualified student work will be published in student publications. **Prerequisite:** JRNL 15 or equivalent experience. English Level 1; Reading Level 1. **Hours:** (72) 1 lect, 3 lab. **Repeat:** 3. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

JRNL 52 MULTI-CULTURAL MEDIA WORKSHOP (4 units)
An extensive introduction to various aspects of media, with specific concentration on newspaper journalism. Open to high school juniors and seniors who qualify for concurrent enrollment. **Prerequisite:** English Level 1; Reading Level 1. **Hours:** (152) 40 hours for 4 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Offered in summer only.

SPECIAL EDUCATION

SP ED 11 BEGINNING AMESLAN (3 units)
Fundamentals of American Sign Language (AMESLAN or A.S.L.). Introduces the history, basic grammatical structure, techniques of signing and non-verbal aspects of American Sign Language. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.
SP ED 12  INTERMEDIATE AMESLAN (3 units)
Develops fluency in American Sign Language. Emphasizes conceptual accuracy, numerical proficiency, and a mastering of the manual alphabet. Refines receptive and expressive skills. Introduces idiomatic expressions. **Prerequisite:** SP ED 11. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

SP ED 13  ADVANCED AMESLAN (3 units)
Instruction in the identification and correct translation of English idioms into sign language. Emphasizes advanced conversational fluency in AMESLAN. **Prerequisites:** SP ED 11 and 12. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

SP ED 54  FINGERSPELLING (1.5 units)
The manual alphabet and numerical digits used in conjunction with American Sign Language. Develops a fluency in expressive and receptive fingerspelling and numbers. **Prerequisite:** None. **Hours:** (27) 3 lect for 9 weeks. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

SP ED 55  CULTURAL AWARENESS OF THE DEAF (1.5 units)
The cultural aspects related to the deaf population. Discusses areas involving language barrier, rights, discrimination and every day obstacles faced by a silent minority. **Prerequisite:** None. **Hours:** 3 lect for 9 weeks. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

SP ED 56  SIGN LANGUAGE SURVIVAL SKILLS (1 unit)
Designed to provide specialized vocabulary in AMESLAN and its use in specific areas of interest. **Prerequisite:** None. **Hours:** (18) 18 hours per unit. **Repeat:** 1 each. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

SP ED 56a  RELIGIOUS SIGNS
SP ED 56b  MEDICAL SIGNS
SP ED 56c  HUMAN SEXUALITY SIGNS
SP ED 56d  SOCIAL SERVICE SIGNS
SP ED 56e  LAW ENFORCEMENT SIGNS
SP ED 56f  EDUCATIONAL SIGNS

SP ED 63  INTERPRETING AMESLAN (3 units)
An introduction to the field of sign language interpreting. Emphasizes conceptual accuracy, clarity, idiomatic expressions and correct grammatical structure used in American Sign Language. **Prerequisite:** SP ED 11, 12, and 13. **Hours:** (54) 3 lect/discussion. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.
SP ED 64  REVERSE INTERPRETING (1.5 units)
An introduction to interpreting from sign to voice what is being transmitted in American Sign Language. Discussions of conceptual accuracy. Appropriate vocalization and the proper interpretation of idiomatic expressions used in American Sign Language. **Prerequisite:** SP ED 63. **Hours:** (27) 3 lect for 9 weeks. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

SP ED 65  SIGN AND SONG (3 units)
Instruction in analyzing and translating lyrics from music into visual vocabulary development, sign clarity and mime techniques. **Prerequisite:** SP ED 11 or evaluation by instructor. **Hours:** (54) 3 lect/discussion. **Repeat:** 1. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

SP ED 66  INTERPRETING LAB (0.5 unit)
A laboratory to enhance interpreting proficiency using American Sign Language. Develops and improves expressive and receptive skills while experiencing a variety of mock interpreting situations. **Prerequisites:** SP ED 11 and 12 or evaluation by instructor. **Hours:** (27) 27 hours lab per one-half unit. **Repeat:** 3. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

**SPEECH**

SPCH 1  SPEECH COMMUNICATION (3 units)
Instruction in the composition, presentation and evaluation of original speeches and critical assessment of other communication events. Emphasizes topic selection, research, organization, development, delivery, audience analysis and critical analysis of persuasive communication. **Prerequisite:** Eligibility for ENGL 1a; Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. (CAN: SPCH 4)

SPCH 2  FUNDAMENTALS OF COMMUNICATION (3 units)
An introduction to all aspects of the communication process, including intra and interpersonal communication, as well as public speaking. Emphasizes an understanding of communication in everyday life in conjunction with a knowledge of how to present ideas. **Prerequisite:** Eligibility for ENGL 1a; Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

SPCH 5  ARGUMENTATION AND DEBATE (3 units)
Instruction in both the theoretical and practical aspects of argumentation (both general and legal) and public debate. Instruction in the composition, presentation and evaluation of speeches of argumentation and debate. Emphasizes research, structuring arguments, evaluating argumentation, analysis, refutation and rebuttal. **Prerequisite:** Eligibility for ENGL 1a; Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

SPCH 18  VOICE AND DICTION (3 units)
Instruction in developing acceptable standards of voice production, emphasizing an understanding of the basic speech mechanism as related to respiration, phonation,
SPCH 21 ORAL INTERPRETATION (3 units)
A study of the theoretical and technical aspects involved in the selection, analysis, and 
oral performance of literature. Includes participation in various types of performance 
exercises including presentation of prose, poetry, drama and readers’ theatre. **Prerequi­
site:** Eligibility for ENGL 1a; Reading Level 1. **Hours:** (54) 3 lect/discussion. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

SPCH 22 READERS’ THEATRE (3 units)
An introduction to the oral performance of literature, with an emphasis on preparing and 
performing literature in solo, simple reading, staged, composite, chamber, and story read­
ing productions. **Prerequisite:** Eligibility for ENGL 1a; Reading Level 1. **Hours:** (54) 3 
lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC Credit limitations. For specific information see counselor.

SPCH 24a BEHAVIOR STYLES IN COMMUNICATION (1.5 units)
Instruction in styles of communication which produce both desirable and undesirable 
results. Emphasizes the communication process, ineffective communication styles (ag­
grressive, passive) and resultant failures and effective communication styles (assertive, 
direct) and resultant successes. **Prerequisite:** English Level 1; Reading Level 1. **Hours:** (27) 3 lect/discussion for 9 weeks. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

SPCH 24b SITUATIONAL COMMUNICATION (1.5 units)
Instruction in creating positive communication styles in emotionally charged situations. 
Emphasizes communication situations in which anxiety, guilt, anger, criticism and 
conflict tend to disrupt effective styles of communication. Vocational, professional and 
personal setting. Analyzes vocational, professional and personal settings. **Prerequi­
site:** English Level 1; Reading Level 1. **Hours:** (27) 3 lect/discussion for 9 weeks. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

SPCH 25 EFFECTIVE COMMUNICATION IN LEADERSHIP (1.5 units)
Instruction in both the theoretical and practical aspects of the relationship between 
leadership, supervision and effective communication. Emphasizes assessment of leader­
sip effectiveness, personality variables, interaction variables, improving the com­
munication climate, improving group processes, improving organizational meetings 
and improving performance appraisal interviews. **Prerequisite:** English Level 1; 
Reading Level 1. **Hours:** (27) 3 lect/discussion for 9 weeks. **CCS:** Liberal Arts and 
Sciences. **Transferable:** CSU and Private Colleges. **Note:** Formerly SPCH 24b Leadership through Effective Communication.
SPCH 27  INTERCOLLEGIATE SPEECH COMPETITION (1 unit)
Training in various speech forms for intercollegiate forensic competition and community speaking. Intensive discussion and practice in prepared and limited preparation events including humorous, oral interpretation, readers' theatre, duet interpretation and communication analysis. Prerequisite: Eligibility for ENGL 1a; Reading Level 1. Hours: (18) 1 lect. Repeat: 3. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

SPCH 27L  INTERCOLLEGIATE SPEECH COMPETITION LABORATORY (1–3 units)
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. Prerequisite: Eligibility for ENGL 1a; Reading Level 1. Hours: (54-162) 1 unit: 3 lab; 2 units: 6 lab; 3 units: 9 lab. Repeat: 3. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

SPCH 31a–31b–31c–31d
PERSUASION IN A DEMOCRATIC SOCIETY (1.5–1.5–1.5–1.5 units)
Prerequisite: Eligibility for ENGL 1a; Reading Level 1. Hours: (27 each) Each 3 lect/discussion for 9 weeks. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

SPCH 31a  FREEDOM OF EXPRESSION
Instruction in the analysis and evaluation of constitutional guarantees of freedom of expression. Instruction in the historical development of freedom of expression, obscenity, legal liabilities. Emphasizes freedom of expression in radio, television and politics.

SPCH 31b  FREEDOM OF SPEECH
Instruction in the analysis and evaluation of constitutional guarantees of freedom of speech. Instruction in the historical background, regulation of time, place and manner, legal protection of the speaker and free speech on college campuses. Emphasizes responsibilities involved in freedom of speech in contemporary American society.

SPCH 31c  THE RHETORIC OF AGITATION
Instruction in the techniques of agitation and revolution with emphasis on the rhetoric of conflict in both formal and informal discourse. Instruction in the values and dangers of agitation. Emphasizes the effect of agitation on decision making in a democratic society.

SPCH 31d  INTERRACIAL COMMUNICATION
Instruction in cultural conflict and confrontation. Instruction in basic communication problems within a multi-racial, multi-cultural society. Emphasizes face-to-face interracial difficulties.
SPCH 51 GENERAL SPEECH (3 units)
A study of the basic concepts of oral communication, especially as they relate to
career-education. Emphasizes those aspects of oral communication which will most
frequently be used in a career setting. Prerequisite: English and Reading Level 2 or
evaluation by instructor. Hours: (54) 3 lect/discussion. CCS: Liberal Arts and
Sciences. Not Transferable: Associate Degree only.

SPEECH COURSES FOR EFL* STUDENTS

SPCH 57ab SPECIAL PROBLEMS IN ENGLISH PRONUNCIATION
FOR BILINGUAL/BICULTURAL STUDENTS
(1.5 - 1.5 units. 57ab equivalent to 3 units)
Designed for students who are completely fluent in English, but who have difficulty
being understood at times because of a dialect or an accent. Goals are to correct pro-
nunciation errors by teaching how sounds are made, to give instruction in rhythm and
intonation, and to correct stress on words in sentences and syllables in words. Prerequi-
site: 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. Hours: (27-27) 3 lect/lab. A student may enter at mid-semester.
CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.

SPCH 57cd SPECIAL PROBLEMS IN ENGLISH PRONUNCIATION
FOR BILINGUAL/BICULTURAL STUDENTS
(1.5 - 1.5 units. 57cd equivalent to 3 units.)
See description for 57ab. Prerequisite: SPCH 57ab OR placement based on the Bakers-
field College English as a Foreign Language Placement Test OR recommendation of any
Bakersfield College instructor. Hours: (27-27) 3 lect/lab. A student may enter at mid-
semester. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.

SPCH 75ab INTERMEDIATE LISTENING/SPEAKING ENGLISH
AS A FOREIGN LANGUAGE (2 - 2 units. 75ab equivalent to 4 units)
Designed to improve the pronunciation, intonation patterns, and aural comprehen-
sion of the non-native English-speaking person. Emphasizes vowels, listening skills,
and vocabulary development. Prerequisite: Placement based on the Bakersfield
College English as a Foreign Language Placement Test. Hours: (36-36) 4
lect/discussion. A student may enter at mid-semester. CCS: Liberal Arts and
Sciences. Not Transferable: Associate Degree only.

SPCH 75cd INTERMEDIATE LISTENING/SPEAKING ENGLISH
AS A FOREIGN LANGUAGE (1.5 - 1.5 units. 75cd equivalent to 3 units)
Designed at a higher level than SPCH 75ab to improve the pronunciation, intonation
patterns, and aural comprehension of the non-native English-speaking person. Em-
phasizes consonants and note taking. Prerequisite: SPCH 75ab OR placement
based on the Bakersfield College English as a Foreign Language Placement Test.
Hours: (27-27) 3 lect/discussion. CCS: Liberal Arts and Sciences. Not Transfer-
able: Associate Degree only.

*EFL—English as a Foreign Language. See also English courses for EFL students.
CERTIFICATES OF ACHIEVEMENT

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

COMPUTER INFORMATION SYSTEMS CERTIFICATE

Designed for the student who plans to specialize in business computer applications. Upon completion of the following courses with at least a “C” grade in each course, a student will be awarded a Computer Information Systems Certificate of Achievement.

Minimum units in required discipline - 33

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTA P 1</td>
<td>Intro Data Proces</td>
<td>3.0</td>
</tr>
<tr>
<td>DTA P 4</td>
<td>COBOL Prog Lang</td>
<td>3.0</td>
</tr>
<tr>
<td>DTA P 6</td>
<td>Intro Prog/RPG II</td>
<td>3.0</td>
</tr>
<tr>
<td>DTA P 7</td>
<td>Sys Analysis/Design</td>
<td>3.0</td>
</tr>
<tr>
<td>DTA P 9</td>
<td>Structd Prog Desgn</td>
<td>1.0</td>
</tr>
<tr>
<td>DTA P 22</td>
<td>Bus Database Systms</td>
<td>3.0</td>
</tr>
<tr>
<td>DTA P 25</td>
<td>Intro Smll Bus Comp</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS A 1a</td>
<td>Prin of Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS A 1b</td>
<td>Prin of Accounting</td>
<td>4.0</td>
</tr>
</tbody>
</table>

COMPUTER SCIENCE CERTIFICATE

Designed for the student who plans to specialize in math, science, or engineering computer applications. Upon completion of the following courses with at least a “C” grade in each course, a student will be awarded a Computer Science Certificate of Achievement.

Minimum units in required discipline - 30 to 32
## 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 in Science or Associate in 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.

For students wishing to transfer, the current catalog of the chosen college or university should be consulted for specific requirements. The college or university should be contacted in insure the transferability of the courses.

## ASSOCIATE IN ARTS

### COMPUTER INFORMATION SYSTEMS

Designed for the student who plans to transfer to California State University system or private colleges as a Computer Information Systems, Management Information Systems, or Data Processing Major. Provides an emphasis in business computer applications with a broad educational background.

**Minimum units required - 19 to 21**

### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTA P 1</td>
<td>Intro Data Proces</td>
<td>3.0</td>
<td>MATH 22</td>
<td>Probability/Statist</td>
<td>5.0</td>
</tr>
<tr>
<td>DTA P 4</td>
<td>COBOL Prog Lang</td>
<td>3.0</td>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM S 5</td>
<td>Intro Prog w/BASIC</td>
<td>3.0</td>
<td>PSYCH 5</td>
<td>Elem Stat Bhv/Soc S</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS A 1a</td>
<td>Prin of Accounting</td>
<td>4.0</td>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTA P 14</td>
<td>Adv Prog in COBOL</td>
<td>3.0</td>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTA P 15</td>
<td>Adv Prog with BASIC</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Other Suggested Courses


ASSOCIATE IN SCIENCE

COMPUTER INFORMATION SYSTEMS

Designed for the student who plans to specialize in business computer applications. The student will learn professional skills leading to employment and will gain a broad educational background. Provides a foundation for further studies in Computer Information Systems, Management Information Systems, or Data Processing.

Minimum units required - 33

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>UN</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTAP 1 Intro Data Proces</td>
<td>3.0</td>
<td>DTA P 14 Adv Prog in COBOL</td>
</tr>
<tr>
<td>DTAP 4 COBOL Prog Lang</td>
<td>3.0</td>
<td>OR</td>
</tr>
<tr>
<td>DTAP 6 Intro Prog/RPG II</td>
<td>3.0</td>
<td>DTA P 16 Adv Prog/RPG II</td>
</tr>
<tr>
<td>DTAP 7 Sys Analysis/Design</td>
<td>3.0</td>
<td>COM S 5 Intro Prog w/BASIC</td>
</tr>
<tr>
<td>DTAP 9 Structrd Prog Design</td>
<td>1.0</td>
<td>OR</td>
</tr>
<tr>
<td>DTAP 22 Bus Database Systms</td>
<td>3.0</td>
<td>COM S 7 Intro Assembly Lang</td>
</tr>
<tr>
<td>DTAP 25 Intro Sml Bus Comp</td>
<td>3.0</td>
<td>OR</td>
</tr>
<tr>
<td>BUS A 1a Prin of Accounting</td>
<td>4.0</td>
<td>BUS A 20 Prin Busnss/Indstry</td>
</tr>
<tr>
<td>BUS A 1b Prin of Accounting</td>
<td>4.0</td>
<td></td>
</tr>
</tbody>
</table>

Other Suggested Courses


COMPUTER SCIENCE

Designed for the student who plans to specialize in math, science, or engineering applications. Students will learn professional skills leading to employment and will gain a broad educational background. Provides a foundation for further studies in Computer Science. Students intending to transfer should take COM S 10.

Minimum units required - 30 to 33

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>UN</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTAP 1 Intro Data Proces</td>
<td>3.0</td>
<td>MATH 6b Analyt Geom Calc II</td>
</tr>
<tr>
<td>DTAP 9 Structrd Prog Design</td>
<td>1.0</td>
<td>MATH 6c Calculus III</td>
</tr>
<tr>
<td>MATH 6a Analyt Geom Calc I</td>
<td>4.0</td>
<td>MATH 22 Probability/Statist</td>
</tr>
</tbody>
</table>
Required for professional degree

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTA P 15</td>
<td>Adv Prog with BASIC</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM S 20</td>
<td>Advanced PASCAL</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Elective Minimum of 6 units

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN 5</td>
<td>Intro Prog w/BASIC</td>
<td>3.0</td>
</tr>
<tr>
<td>UN 7</td>
<td>Intro Assembly Lang</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Other Suggested Courses

PHYS C 2a Gen Physc-Mech/Heat (4), PHYS C 2b Gen Physc-SLEMMP (4), PHIL 7 Intro Logic (3), ELE T 1 Survey/Electronics (3).

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: lect lecture; lab laboratory; demo demonstration; Repeat repeatability; CCS Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. NOTE: If repeatability is not shown, course may not be repeated.

COMPUTER STUDIES

COMPUTER STUDIES LABORATORIES

A number of Computer Science and Data Processing courses have associated laboratory courses for which concurrent enrollment with the lecture is required. The labs are intended to provide a supervised laboratory environment for the completion of assigned computer exercises.

COM S 5 INTRODUCTION TO PROGRAMMING WITH BASIC (3 units)

Fundamentals of programming and operating computer systems in BASIC (Beginner's All-purpose Symbolic Instruction Code). Develops programming and problem solving skills and provides experience in using the computer as a problem solving tool in business, mathematics, physical sciences, social sciences, and other areas. Prerequisites: Two years of high school algebra or MATH D or equivalent or evaluation by instructor. Reading Level 1. Some previous experience with computer usage, programming logic, or DTA P 1 or DTA P 9 recommended and concurrent enrollment in COM S 5L. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. Credit limitations. For specific information see counselor.
COM S 5L   INTRO TO PROGRAMMING W/BASIC LAB (1 unit)
Lab portion of COM S 5. **Prerequisites:** Concurrent enrollment in the correponding computer studies class. Reading Level 1. **Hours:** (54) 3 by arrangement. **CCS:** Liberal Arts and Sciences/Occupational Education. **Transferable:** Transferability based on associated lecture class.

COM S 7   INTRODUCTION TO ASSEMBLY LANGUAGE (3 units)
Fundamentals of assembly language programming. Topics include binary octal and hexadecimal arithmetic, data storage, bit manipulation, processor architecture and instruction set, system hardware, operating-system supervisorial functions, program modularization through effective use of macros and procedures, use of assembler, linker, object-library manager, and debugger storage. Emphasizes the development of libraries (macro and object) of commonly-used input/output routines. The primary machine for the course will vary; the major topics of the course are common to assembly-language programming on any processor, and in any environment. **Prerequisites:** Two years of high school algebra, or MATH D or equivalent, DTA P 1 (or equivalent), and atlease one course in a high-level language or evaluation by instructor. Reading Level 1 and concurrent enrollment in COM S 7L. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. Credit limitations. For specific information see counselor.

COM S 7L   INTRO TO ASSEMBLY LANGUAGE LAB (1 unit)
Lab portion of COM S 7. **Prerequisites:** Concurrent enrollment in the corresponding computer studies class. Reading Level 1. **Hours:** (54) 3 by arrangement. **CCS:** Liberal Arts and Sciences/Occupational Education. **Transferable:** Transferability based on associated lecture class.

COM S 10   INTRODUCTION TO PROGRAMMING WITH PASCAL (3 units)
Fundamentals of structured programming and problem solving and operating computer systems in Pascal. Develops structured programming and problem solving skills and provides experience in using the computer in a variety of applications. **Prerequisites:** Two years of high school algebra or MATH D or equivalent or evaluation by instructor. Reading Level 1 and concurrent enrollment in COM S 10L. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. Credit limitations. For specific information see counselor.

COM S 10L   INTRO TO PROGRAMMING W/PASCAL LAB (1 unit)
Lab portion of COM S 10. **Prerequisite:** Concurrent enrollment in the corresponding computer studies class. Reading Level 1. **Hours:** (54) 3 by arrangement. **CCS:** Liberal Arts and Sciences/Occupational Education. **Transferable:** Transferability based on associated lecture class.

COM S 11   INTRODUCTION TO PROGRAMMING WITH C (3 units)
Fundamentals of structured programming and operating computer systems in C. Develops structured programming and problem-solving skills and provides experience in using the computer in a variety of applications. **Prerequisites:** Successful completion of a high-level language (BASIC, Cobol, Fortran, or Pascal), or an Assembly
Language Course or evaluation by instructor. Reading Level 1 and concurrent enrollment in COM S 11L. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

**COM S 11L  INTRO TO PROGRAMMING W/C LAB (1 unit)**
Lab portion of COM S 11. **Prerequisite:** Concurrent enrollment in the corresponding computer studies class. Reading Level 1. **Hours:** (54) 3 by arrangement. **CCS:** Liberal Arts and Sciences/Occupational Education. **Transferable:** Transferability based on associated lecture class.

**COM S 18  INTRODUCTION TO COMPUTER PROGRAMMING WITH FORTRAN (3 units)**
Fundamentals of programming and operating computer systems using the FORTRAN 77 language. Develops skills and provides experience in using the computer as a problem solving tool in mathematics, physical sciences, engineering, life sciences, business, and social sciences. **Prerequisite:** MATH 6a or equivalent or evaluation by instructor and concurrent enrollment in COM S 18L. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. Credit limitations. For specific information see counselor.

**COM S 18L  INTRO TO COMPUTER PROGRAMMING W/FORTRAN LAB (1 unit)**
Lab portion of COM S 18. **Prerequisite:** Concurrent enrollment in the corresponding computer studies class. Reading Level 1. **Prerequisite:** Concurrent enrollment in the corresponding computer studies class. **Hours:** (54) 3 by arrangement. **CCS:** Liberal Arts and Sciences/Occupational Education. **Transferable:** Transferability based on associated lecture class.

**COM S 19f/19p  COMPUTER PROGRAMMING FOR SCIENCE, ENGINEERING AND TECHNOLOGY (4 units)**
19f—19p (3—3) equivalent to 19fp
Methods used in the solution of science and engineering problems on digital computers. Programming of algorithms for solutions of numerical problems using a higher level language. PASCAL is the language used in ENGR 19p, recommended for computer science or electrical engineering majors. FORTRAN 77 is the language used in ENGR 19f recommended for other majors. **Prerequisite:** Reading Level 1, MATH 6a or TEC M 53c (may be taken concurrently). **Hours:** (90-108) 3 units: 2 lect, 3 lab; 4 units: 3 lect, 3 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. **Note:** Not open to students with credit in ENGR 19f/19p.

**COM S 20  ADVANCED PROGRAMMING WITH PASCAL (3 units)**
Advanced techniques of programming in the structured problem solving computer language Pascal. Emphasizes developing advanced skills in algorithm building and understanding data structures in a wide variety of applications. **Prerequisites:** COM S 10 and concurrent enrollment in COM S 20L. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. Credit limitations. For specific information see counselor.
COM S 20L  ADVANCED PROGRAMMING W/PASCAL LAB (1 unit)
Lab portion of COM S 20. **Prerequisite:** Concurrent enrollment in the corresponding computer studies class. **Hours:** (54) 3 by arrangement. **CCS:** Liberal Arts and Sciences/Occupational Education. **Transferable:** Transferability based on associated lecture class.

COM S 21  SPECIAL PROJECTS IN COMPUTER SCIENCE (1 unit. Limit 2 units)
Individual directed work in a computer science and computer information system area. Individual research problems using materials, equipment and techniques not available in larger classes. Designed for students' vocational application of their choice and to tutor students in the computer laboratory. **Prerequisite:** Completion of a basic course in computer science or business data processing with a grade of “B” and evaluation by the instructor. **Hours:** (18) 18 lab per unit. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

COM S 45  LEARNING WITH COMPUTERS (3 units)
Introduction to Computer Assisted Instruction (CAI), in the use of computers in teaching. Includes an introduction to computers and computing, programming languages, design and development of instructional software, use of computer graphics, microcomputers, and the selection and evaluation of instructional programs and computer equipment. **Prerequisites:** Reading Level 1 and concurrent enrollment in COM S 45L. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

COM S 45L  LEARNING WITH COMPUTERS LAB (0.5 units)
Lab portion of COM S 45. **Prerequisite:** Concurrent enrollment in the corresponding computer studies class. Reading Level 1. **Hours:** (27) 1½ by arrangement. **CCS:** Liberal Arts and Sciences/Occupational Education. **Transferable:** Transferability based on associated lecture class.

COM S 48  INTRODUCTION TO COMPUTER ASSISTED INSTRUCTION (1 unit)
Use of a system wordprocessor, test generating and quiz systems, a computer managed instruction system, and computer assisted instruction systems. **Prerequisites:** Reading Level 1 and concurrent enrollment in COM S 48L. **Hours:** (18) 2 lect for 9 weeks. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

COM S 48L  INTRO TO COMPUTER ASSISTED INSTRUCTION LAB (0.5 units)
Lab portion of COM S 48. **Prerequisite:** Concurrent enrollment in the corresponding computer studies class. **Hours:** (9) 1 by arrangement for 9 weeks. **CCS:** Liberal Arts and Sciences/Occupational Education. **Transferable:** Transferability based on associated lecture class.
DATA PROCESSING

DTA P 1 INTRODUCTION TO DATA PROCESSING (3 units)
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 sciences. Includes the history of data processing, computer system components, sequential and direct-access processing, database management systems, tele-processing, distributed processing, and beginning BASIC programming. Prerequisites: Minimum one year of high school algebra or MATH A (may be taken concurrently) or evaluation by instructor. Reading Level 1 and concurrent enrollment in DTA P 1L. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. Credit limitations. For specific information see counselor.

DTA P 1L INTRODUCTION TO DATA PROCESSING LAB (0.5 units)
Lab portion of DTA P 1. Prerequisites: Concurrent enrollment in the corresponding computer studies class. Reading Level 1. Hours: (27) 1 1/2 by arrangement. CCS: Liberal Arts and Sciences/Occupational Education. Transferable: Transferability based on associated lecture class.

DTA P 4 COBOL PROGRAMMING LANGUAGE (3 units)
The fundamentals of the COBOL programming language. Students will be able to write structured COBOL programs to solve various types of business problems. Prerequisites: DTA P 1 or evaluation by instructor and concurrent enrollment in DTA P 4L. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. Credit limitations. For specific information see counselor.

DTA P 4L COBOL PROGRAMMING LANGUAGE LAB (2 units)
Lab portion of DTA P 4. Prerequisite: Concurrent enrollment in the corresponding computer studies class. Hours: (108) 6 by arrangement. CCS: Liberal Arts and Sciences/Occupational Education. Transferable: Transferability based on associated lecture class.

DTA P 6 INTRODUCTION TO PROGRAMMING WITH RPGII (3 units)
The fundamentals of the RPGII programming language, the basics of RPGII program logic and coding, and programming for various business applications. Prerequisite: DTA P 1 or evaluation by instructor. Hours: (90) 3 lect, 2 lab. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

DTA P 7 SYSTEMS ANALYSIS AND DESIGN (3 units)
The tools and techniques involved in the analysis and design of computerized business systems. Covers investigative techniques such as interviewing, sampling, questionnaire design, cost-benefit analysis, project management tools, and evaluation of hardware, software and vendors. Actual business systems will be analyzed and designed. Prerequisites: DTA P 1 and a high-level programming language and concurrent enrollment in DTA P 7L. Reading Level 1. Hours: (54) 3 lect. CCS: Occupational Education. Transferable: CSU and Private Colleges.
DTA P 7L SYSTEMS ANALYSIS AND DESIGN LAB (0.5 units)
Lab portion of DTA P 7. Prerequisite: Concurrent enrollment in the corresponding computer studies class. Hours: (27) 1½ by arrangement. CCS: Liberal Arts and Sciences/Occupational Education. Transferable: Transferability based on associated lecture class.

DTA P 9 STRUCTURED PROGRAM DESIGN (1 unit)
The fundamentals of writing computer programs. Emphasizes the development of logic to solve problems. Covers various tools and techniques used to write structured programs using any programming language. Prerequisite: Reading Level 1. Hours: (18) 3 lect for 6 weeks. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

DTA P 11 COMPUTER LITERACY FOR HEALTH CAREERS (1 unit)
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, and applications in health careers. Prerequisites: Student must be accepted into one of the Bakersfield College health career programs or be an applicant to a health career program. Reading Level 1 and concurrent enrollment in DTA P 11L. Hours: (18) 2 lect for 9 weeks. CCS: Occupational Education. Transferable: CSU and Private Colleges.

DTA P 11L COMPUTER LITERACY FOR HEALTH CAREERS LAB (0.5 units)
Lab portion of DTA P 11. Prerequisite: Concurrent enrollment in the corresponding computer studies class. Reading Level 1. Hours: (9) 1 by arrangement for 9 weeks. CCS: Liberal Arts and Sciences/Occupational Education. Transferable: Transferability based on associated lecture class.

DTA P 14 ADVANCED PROGRAMMING IN COBOL (3 units)
Advanced applications techniques, procedures, and language statements in COBOL. Students will be able to write COBOL programs of professional quality. Prerequisites: DTA P 4 or evaluation by instructor and concurrent enrollment in DTA P 14L. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. Credit limitations. For specific information see counselor.

DTA P 14L ADVANCED PROGRAMMING IN COBOL LAB (2 units)
Lab portion of DTA P 14. Prerequisite: Concurrent enrollment in the corresponding computer studies class. Hours: (108) 6 by arrangement. CCS: Liberal Arts and Sciences/Occupational Education. Transferable: Transferability based on associated lecture class.

DTA P 15 ADVANCED PROGRAMMING WITH BASIC (3 units)
Advanced application topics in structured, business-oriented programming in the BASIC (Beginner's All-purpose Symbolic Instruction Code) programming language. Topics include structured programming techniques (writing, “maintainable” programs,
elimination of GOTO's), menu handling, use of files (sequential, virtual-array, relative-record, random, and indexed-sequential), data formatting, arrays and matrices, sorting and searching, and use of peripheral devices. **Prerequisites:** COM S 5 and DTA P 1 or equivalent and concurrent enrollment in DTA P 15L. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. Credit limitations. For specific information see counselor.

**DTA P 15L ADVANCED PROGRAMMING W/BASIC LAB (1 unit)**
Lab portion of DTA P 15. **Prerequisite:** Concurrent enrollment in the corresponding computer studies class. **Hours:** (54) 3 by arrangement. **CCS:** Liberal Arts and Sciences/Occupational Education. **Transferable:** Transferability based on associated lecture class.

**DTA P 16 ADVANCED PROGRAMMING IN RPGII (3 units)**
Advanced RPGII file and array processing and programming techniques commonly used in current programming environments. **Prerequisite:** DTA P 6 or evaluation by instructor. **Hours:** (90) 3 lect, 2 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

**DTA P 20 OPERATING SYSTEM PROCEDURAL LANGUAGE (3 units)**
Procedures using the Operation Control Language (OCL) of the IBM System /36 and use of system utilities such as the Data File Utility, the Screen Design Aid, the Source Entry Utility, the Programmer and Operator Productivity Aid, and the system sort. Covers the fundamentals necessary to effectively use and operate a medium-sized computer in a business setting. **Prerequisite:** A high-level programming course with a grade of "C" or evaluation by instructor. Reading Level 2. **Hours:** (90) 3 lect, 2 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

**DTA P 22 BUSINESS DATABASE SYSTEMS (3 units)**
Fundamentals of the use of relational and CODASYL model databases in a business environment. Emphasizes the use of SQL, IDMS, and dBASE III database formats. Covers various data structures and the designing to databases for both the relational and CODASYL models, as well as the fundamentals of writing business applications. **Prerequisites:** DTA P 1 and 4 and concurrent enrollment in DTA P 22L. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

**DTA P 22L BUSINESS DATABASE SYSTEMS LAB (0.5 units)**
Lab portion of DTA P 22. **Prerequisite:** Concurrent enrollment in the corresponding computer studies class. **Hours:** (27) 1 1/2 by arrangement. **CCS:** Liberal Arts and Sciences/Occupational Education. **Transferable:** Transferability based on associated lecture class.

**DTA P 25 INTRODUCTION TO SMALL BUSINESS COMPUTERS (3 units)**
Provides a working knowledge of small computers. Covers background and orientation material on microcomputers, including hardware and software selection. Focuses on the
business applications of small computers, including word processing, spreadsheet, data management, and graphics. **Prerequisites:** Reading Level 1 and concurrent enrollment in DTA P 25L. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

**DTA P 25L INTRO TO SMALL BUSINESS COMPUTERS LAB (0.5 units)**
Lab portion of DTA P 25. **Prerequisite:** Concurrent enrollment in the corresponding computer studies class. **Hours:** (27) 1½ by arrangement. **CCS:** Liberal Arts and Sciences/Occupational Education. **Transferable:** Transferability based on associated lecture class.

**DTA P 40 THE NEW LITERACY (TV) (3 units)**
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 biomedical 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. **Prerequisite:** Reading Level 1. **Hours:** (26) 30-lesson television series, plus 1 orientation, 2 review sessions, 2 test sessions. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges. UC credit limitations. For specific information see counselor.

**DTA P 52 INTRODUCTION TO THE MICROCOMPUTER (1 unit)**
Introduction to the microcomputer. Uses the Disk Operating System (DOS) on microcomputers including program and file capabilities, advanced features, many utilities and major applications, and provide a basis for computer literacy. **Prerequisites:** Concurrent enrollment in DTA P 52L. **Hours:** (18) 3 lect for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**DTA P 52L INTRO TO THE MICROCOMPUTER LAB (0.5 units)**
Lab portion of DTA P 52. **Prerequisite:** Concurrent enrollment in the corresponding computer studies class. **Hours:** (9) 1½ by arrangement for 6 weeks. **CCS:** Liberal Arts and Sciences/Occupational Education. **Transferable:** Transferability based on associated lecture class.

**DTA P 61 INTRODUCTION TO LOTUS 1-2-3 (1 unit)**
Introduces 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. **Prerequisites:** Some knowledge of microcomputer operation recommended and concurrent enrollment in DTA P 61L. **Hours:** (18) 3 lect for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**DTA P 61L INTRO TO LOTUS 1-2-3 LAB (0.5 units)**
Lab portion of DTA P 61. **Prerequisite:** Concurrent enrollment in the corresponding computer studies class. Reading Level 1. **Hours:** (9) 1½ by arrangement for 6 weeks. **CCS:** Liberal Arts and Sciences/Occupational Education. **Transferable:** Transferability based on associated lecture class.
DTA P 62a  INTRODUCTION TO WORDSTAR (1 unit)
Introduces the use of 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. **Prerequisites:** Some knowledge of microcomputer operations recommended and concurrent enrollment in DTA P 62aL. **Hours:** (18) 3 lect for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

DTA P 62aL  INTRO TO WORDSTAR LAB (0.5 units)
Lab portion of DTA P 62a. **Prerequisite:** Concurrent enrollment in the corresponding computer studies class. **Hours:** (9) 1½ by arrangement for 6 weeks. **CCS:** Liberal Arts and Sciences/Occupational Education. **Transferable:** Transferability based on associated lecture class.

DTA P 63  INTRODUCTION TO dBASE II AND III (1 unit)
Introduces the use of dBASE II/III database management program, including creating and updating databases, writing command files to access databases, producing reports from the contents of databases, and preparing databases for access by other programming languages. **Prerequisites:** Some knowledge of microcomputer operations recommended and concurrent enrollment in DTA P 63L. **Hours:** (18) 3 lect for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

DTA P 63L  INTRO TO DBASE II AND III LAB (0.5 units)
Lab portion of DTA P 63. **Prerequisite:** Concurrent enrollment in the corresponding computer studies class. **Hours:** (9) 1½ by arrangement for 6 weeks. **CCS:** Liberal Arts and Sciences/Occupational Education. **Transferable:** Transferability based on associated lecture class.

DTA P 64  INTRODUCTION TO BUSINESS GRAPHICS (1 unit)
Designed to use microcomputer software to produce charts and graphs for business purposes. Focuses on the creation of graphs using CHARTMASTER, the use of the graphics portion of LOTUS 1-2-3, the enhancement of business graphics by the use of electronic clip art, and the transfer of data from spreadsheets to graphics programs. **Prerequisite:** Familiarity with the IBM PC operating system and microcomputer spreadsheets highly recommended and concurrent enrollment in DTA P 64L. **Hours:** (18) 3 lect for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

DTA P 64L  INTRO TO BUSINESS GRAPHICS LAB (0.5 units)
Lab portion of DTA P 64. **Prerequisite:** Concurrent enrollment in the corresponding computer studies class. **Hours:** (9) 1½ by arrangement for 6 weeks. **CCS:** Liberal Arts and Sciences/Occupational Education. **Transferable:** Transferability based on associated lecture class.

DTA P 66a  INTRODUCTION TO WORDPERFECT (1 unit)
Enables the student to use the WordPerfect 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. **Prerequisites:** Some knowledge of microcomputer operations recommended and concurrent enrollment in DTA P 66aL. **Hours:** (18) 3 lect for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
options. Prerequisite: Some knowledge of microcomputer operations recommended. Concurrent enrollment in DTA P 66aL or OFF T 66aL. Hours: (18) 3 lect for 6 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only. Not open to students with credit in OFF T 66a. Formerly DTA P 62b.

DTA P 66aL INTRO TO WORDPERFECT LAB (0.5 units)
Lab portion of DTA P 66a. Prerequisite: Concurrent enrollment in the corresponding computer studies class. Hours: (9) 1 1/2 by arrangement for 6 weeks. CCS: Liberal Arts and Sciences/Occupational Education. Transferable: Transferability based on associated lecture class.

DTA P 66b ADVANCED WORDPERFECT (1 unit)
An understanding of the advanced capabilities of the WordPerfect Word Processing Microcomputer Program. Students will have the opportunity to work with the program and learn how to incorporate advanced features. Prerequisite: DTA P 66a, OFF T 66a, or evaluation by instructor; concurrent enrollment in DTA P 66bL or OFF T 66bL. English Level 1. Hours: (18) 3 lect for 6 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Not open to students with credit in OFF T 66b.

DTA P 66bL ADVANCED WORDPERFECT LAB (0.5 units)
Lab portion of DTA P 66b. Prerequisite: Concurrent enrollment in the corresponding computer studies class. Reading Level 1. Hours: (9) 1 1/2 by arrangement for 6 weeks. CCS: Liberal Arts and Sciences/Occupational Education. Transferable: Transferability based on associated lecture class.

DTA P 70 TOPICS IN MICROCOMPUTER APPLICATIONS (0.5 - 1 unit)
Topics in series about Microcomputer Literacy will be offered on an occasional basis as the community need seems to indicate. Microcomputer application courses both for the home and office will offer hands-on experience with popular microcomputers. Prerequisite: None. Hours: (9-18) 18 lect per unit. CCS: Occupational Education. Not Transferable: Associate Degree only.

DTA P 70a PC-FILE (1 unit) Hours: (18) 3 lect for 6 weeks.

DTA P 71 ADVANCED LOTUS 1-2-3 (1 unit)
A continuation of DTA P 61 which involves the development of advanced computer spreadsheet skills, such as manipulation of databases, the creation of macros, and utilization of graphics and printing capabilities. Prerequisite: DTA P 61 and concurrent enrollment in DTA P 71L. Hours: (18) 3 lect for 6 weeks CCS: Occupational Education. Not Transferable: Associate Degree only.

DTA P 71L ADVANCED LOTUS 1-2-3 LAB (0.5 units)
Lab portion of DTA P 71. Prerequisite: Concurrent enrollment in the corresponding computer studies class. Hours: (9) 1 1/2 by arrangement for 6 weeks. CCS: Liberal Arts and Sciences/Occupational Education. Transferable: Transferability based on associated lecture class.
DTA P 72  INTRODUCTION TO
PROGRAMMING WITH dBASE III, III+ (1 unit)
Fundamentals of programming in dBASE III, III+. Develops programming and
problem-solving skills and provides experience in a data base programming environ-
ment. Prerequisite: DTA P 63 or evaluation by instructor and concurrent enrollment
in DTA P 72L. Hours: (18) 3 lect for 6 weeks. CCS: Occupational Education. Not
Transferable: Associate Degree only.

DTA P 72L  INTRO TO PROGRAMMING
WITH DBASE III, III + LAB (0.5 units)
Lab portion of DTA P 72. Prerequisite: Concurrent enrollment in the corresponding
computer studies class. Hours: (9) 1 1/2 by arrangement for 6 weeks. CCS: Liberal
Arts and Sciences/Occupational Education. Transferable: Transferability based on
associated lecture class.
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**

The following abbreviations are commonly used in the course descriptions: lect lecture; lab laboratory; demo demonstration; Repeat repeatability; CCS Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. **NOTE: If repeatability is not shown, course may not be repeated.**

**COUNSELING**

**COUNS 1 EDUCATIONAL PLANNING (0.5 unit)**
Designed to assist students in understanding college requirements and to help them in making educational plans. Required for both the A.A. and A.S. degrees. **Prerequisite:** Reading Level 1. **Hours:** (9) 9 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

**COUNS 4 INTRODUCTION TO COLLEGE FOR INTERNATIONAL STUDENTS (1 unit)**
Designed to give international students a practical training in studying effectively, the techniques for survival within the college setting, and making their educational plan for college studies. Satisfies 0.5 unit counseling requirement for graduation from Bakersfield College. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (18) 2 lect/discussion for 9 weeks. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

**COUNS 5 CURRENT CONCERNS SEMINAR (1 – 1 – 1 – 1 unit)**
Discussions of current topics of interest and significance to students. The topics are to be timely and relevant to student needs. **Prerequisite:** Reading Level 1. **Hours:** (18) 18 lect per unit. Each topic may be taken only once. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

**COUNS 11 TOOLS FOR COLLEGE SURVIVAL (2 units)**
Increases students’ probability of success in college by helping students obtain skills necessary to reach their educational objective. Provides the opportunity for students to learn and adopt skills proven to promote success in college, including study skills and personal life skills. Also includes graduation requirements as well as admission and transfer requirements. Satisfies 0.5 unit counseling requirement for graduation from Bakersfield College. **Prerequisite:** Reading Level 1. **Hours:** (40½) 3 lect for 12½ weeks. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges. **Note:** Not open to students with credit in GN ST 11.
COUNS 13a OPTIONS: DISCOVERING YOURSELF AND YOUR CAREER (3 units)
Opportunity Program Training Individuals for Occupational and Non-traditional career Success offers an introduction to the world of work and higher education. Through vocational and personality testing, values clarification and goal-setting strategies, the student is guided through the process of career decision-making. Emphasizes the ongoing process of life planning as a prerequisite to career success. Includes an introduction to the college and educational planning. Satisfies the 0.5 unit counseling requirement for graduation from Bakersfield College. Prerequisite: Reading Level 1. Hours: (54) 3 lect/discussion. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges. Note: Not open to students with credit in GN ST 13a.

COUNS 13b OPTIONS: ORIENTATION TO COLLEGE AND CAREERS (5 units)
Opportunity Program Training Individuals for Occupational and Non-traditional career Success. The program is designed to assist the returning or new student to become academically successful while developing an appropriate career plan. Offers a combination of learning skills techniques and career exploration activities. Topics include time planning, study techniques, communication skills, personal issues faced by many new and returning students, self-assessment, job search, resume writing, interviewing and the world of work. Satisfies the 0.5 unit counseling requirement for graduation from Bakersfield College. Prerequisite: Reading Level 1. Hours: (90) 5 lect/discussion. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges. Note: Not open to students with credit in GN ST 13b.

COUNS 15 CAREER SHADOWING (0.5 unit)
Students will explore a specific job or two full working days through the cooperation of local employers and employees; meet with the volunteer employee and actually “shadow” the employee through his/her usual daily duties; and meet with the instructor before and after the shadowing experience to plan, evaluate and continue the career choice process. Prerequisite: GN ST 13/COUNS 13; or GN ST 13a/COUNS 13a; or GN ST 13b/COUNS 13b. Hours: (18) 13 practicum experience. Repeat: 1. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

COUNS 52 BASIC TOOLS FOR COLLEGE SUCCESS (3 units)
Increases the level-2 readers’ probability of success in college by helping students obtain skills necessary to reach their educational objective. Provides the opportunity for students to learn and adopt skills proven to promote success in college, including study skills and personal life skills. Includes graduation requirements as well as admission and transfer requirements. Satisfies the 0.5 unit counseling requirement for graduation from Bakersfield College. Prerequisite: Reading Level 2. Hours: (54) 3 lect. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Not open to students with credit in GN ST 52.

COUNS 76 INTRODUCTION TO COSMETOLOGY (1 unit)
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. Prerequisite: Reading Level 1. Hours: (9) 9 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.
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

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 1b and at least one of the following: English 5a and 5b or English 30a and 30b. Students planning to transfer to the University of California should consider English 2. For specific information, students should consult the catalog of the school to which they intend to transfer.

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. To determine the appropriate level, Bakersfield College administers objective and essay tests to entering students. All students must take the essay test to be admitted to a composition class.

Students who are classified 1a are eligible for English 1a; Level 1 for English 1; Level 2 for English 60; and Level 3 for Learning Skills 68, English 63, English 64, English 71abc or English 77abcdef.

After a student begins the English 60, 1, 1a sequence, the student must earn a minimum grade of "C" 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

ENGL 1 INTRODUCTORY COMPOSITION (4 units)
Emphasizes the writing of expository and argumentative essays; also stresses the comprehension and analysis of readings. Satisfies the General Education requirement in written English for the AA and AS Degrees and prepares transfer students for ENGL 1a. **Prerequisite:** ENGL Level 2 classification on the English Placement Test, or ENGL 60 with a grade of “C.” **Hours:** (72) 4 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

ENGL 1a EXPOSITORY COMPOSITION (4 units)
Expository writing and reading. Emphasizes the organization and development of expository essays, study of style, application of critical reading and thinking skills, and preparation of a research paper. **Prerequisite:** ENGL 1a placement or ENGL 1 with a grade of “C.” **Hours:** (72) 4 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

ENGL 1b INTRODUCTION TO TYPES OF LITERATURE (3 units)
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. **Prerequisite:** Eligibility for ENGL 1a. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

ENGL 2 ADVANCED COMPOSITION (5 units)
Expository writing; reading of expository and literary works; study of the thought and style of selected expository and literary masterworks from Plato to the present; fulfills second semester U.C. Berkeley Reading and Composition requirement. **Prerequisite:** ENGL 1a and recommendation of a counselor or an instructor. **Hours:** (90) 4 lect/discussion plus 1 hour arranged. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

ENGL 5a—5b SURVEY OF ENGLISH LITERATURE TO 1900 (3–3 units)
A historical survey of English literature, emphasizing critical reading of representative works from Beowulf to James Joyce. Usually includes a field trip to the Huntington Library (San Marino, CA) for firsthand observation of manuscripts and printed books
important to the history of English literature. Required for students whose major or minor is English and recommended for students who desire to extend their knowledge of the literary tradition. **Prerequisite:** Eligibility for ENGL 1a. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

**ENGL 11 MODERN DRAMA (3 units)**
An introductory course in modern drama, emphasizing critical analysis and providing a basis for appreciation of notable works of twentieth century drama. Provides an overview of theatre in the twentieth century. Continued instruction in the skills of writing, discussing, listening, and viewing dramatic productions. **Prerequisite:** Eligibility for ENGL 1a. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

**ENGL 12 MODERN SHORT FICTION (3 units)**
Examines the development of modern fiction through a study of classic examples, with emphasis on the short novel and novel. Also examines trends in contemporary fiction through a study of short stories and novels, including the study of the elements of fiction and critical approaches to fiction. **Prerequisite:** Eligibility for ENGL 1a. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

**ENGL 27 THE BIBLE AS LITERATURE (3 units)**
Poetry and prose of the Bible, especially of the Old Testament. Includes lecture, discussion, and dramatic readings. **Prerequisite:** Eligibility for ENGL 1a. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

**ENGL 28 CLASSICAL MYTHOLOGY (3 units)**
A study of classical myth, saga, and local legend, primarily Greek and Roman. Includes Egyptian, Babylonia, Norse, and Celtic/Anglo Saxon. Relates classical myths to historical and modern culture. **Prerequisite:** Reading Level 1 and ENGL 1a eligibility. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

**ENGL 29 SCIENCE FICTION (3 units)**
Through reading and discussion of novels and short stories, students will learn to recognize the themes of contemporary science fiction. Lectures will cover the history of the genre, focusing on developments since World War II. Some attention will be given to the related genre of fantasy and horror fiction as well as to science fiction films. **Prerequisites:** Eligibility for English 1a or evaluation by instructor. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

**ENGL 30a–30b SURVEY OF AMERICAN LITERATURE (3–3 units)**
A study of the most notable American authors from the Colonial period to the present with emphasis on the intrinsic value of the literature. Recommended as an elective for majors in the humanities, history or education. **Prerequisite:** Eligibility for ENGL 1a. 30a is not prerequisite to 30b. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.
ENGL 34 INTRODUCTION TO BOOKS AND LIBRARIES (0.5 unit)
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. Prerequisite: Reading Level A.
Hours: (9) 1 lect for 9 weeks. CCS: Liberal Arts and Sciences. Transferable: CSU
and Private Colleges.

ENGL 35 CHILDREN'S LITERATURE AND STORYTELLING (3 units)
Selection, reading, evaluation, and discussion of literature for pre-school, elementary,
and intermediate grades, plus a practicum in sharing of that literature through oral
presentation. Prerequisite: ENGL Level 1; Reading Level 1. Hours: (54) 3
lect/demonstration and field practice by arrangement. CCS: Liberal Arts and
Sciences. Transferable: CSU and Private Colleges. Credit limitations. For specific in-
formation see counselor.

ENGL 41a–41b INTRODUCTION TO CREATIVE WRITING (3–3 units)
Creative writing of poetry, short plays and prose forms. Emphasizes creativity and
control of language, sound, imagery, and sense in poetry; character, plot, theme, and
point of view in fiction and drama. Basics of submitting manuscripts to publishers. Pre-
requisite: Eligibility for ENGL 1a. Hours: (54) 3 lect. CCS: Liberal Arts and
Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For
specific information see counselor.

ENGL 41c–41d INTRODUCTION TO CREATIVE WRITING (2–2 units)
Creative writing of poetry, short plays and prose forms. Emphasizes creativity and
control of language, sound, imagery, and sense in poetry; character, plot, theme, and
point of view in fiction and drama. Basics of submitting manuscripts to publishers. Pre-
requisite: Eligibility for ENGL 1a. Hours: (54) 3 lect. CCS: Liberal Arts and
Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For
specific information see counselor.

ENGL 60 BASIC WRITING SKILLS (4 units)
Review and application of fundamentals of standard English. Emphasizes sentence and
paragraph writing. Practice in the writing process. Prerequisite: English Level 3. Hours:
(72) 4 lect. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.

ENGL 63 BEGINNING VOCABULARY DEVELOPMENT (3 units)
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. Emphasizes using new
words in students' own speech and writing. Prerequisite: None. Hours: (54) 3 lect.
CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.
ENGL 64 LANGUAGE STUDY AND VOCABULARY DEVELOPMENT (3 units)

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. **Prerequisite:** None. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

ENGL 65 MODERN CULTURE AND THE POPULAR ARTS (3 units)

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. **Prerequisite:** None. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

ENGL 71a–71b–71c SPECIAL GRAMMAR REVIEW (1–1–1 unit)

ENGL 71a—Parts of Speech and How They Function. ENGL 71b—Variation of Sentence Structure. ENGL 71c—Punctuation.

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 noun forms. **Prerequisite:** None. **Hours:** (18-54) 3 lect/discussion for 6 weeks per unit. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

ENGL 72 INTENSIVE GRAMMAR DRILL FOR FOREIGN AND BICULTURAL AMERICAN STUDENTS (1 unit)

Recommended for foreign and bicultural American students who need extra help with verbs, articles and prepositions. Emphasizes intensive oral and written drill. **Prerequisite:** Completion of ENGL 75ab and ENGL 75cd or placement based on the Bakersfield College English as a Foreign Language Placement Test OR recommendation of any Bakersfield College English instructor. **Hours:** (54) 3 lect. **Repeat:** 1. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

ENGL 75ab LOW INTERMEDIATE ENGLISH AS A FOREIGN LANGUAGE (4 units)

75a—75b (2—2) equivalent to 75ab.

Emphasizes reading and writing practice of the vocabulary, idioms and grammatical structures of basic English. **Prerequisite:** Admission to Bakersfield College AND placement on the Bakersfield College English as a Foreign Language Placement Test. **Hours:** (36-72) 4 lect/discussion for 9 weeks per 2 units. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.
ENGL 75cd  INTERMEDIATE ENGLISH
AS A FOREIGN LANGUAGE (3 units)
75c—75d (1.5—1.5) equivalent to 75cd.
Continuation of ENGL 75ab with more complex intermediate reading and writing. Covers the more advanced uses of the structures of English grammar and continues to build reading and writing skills and vocabulary. **Prerequisite:** Admission to Bakersfield College AND placement on the Bakersfield College English as a Foreign Language Placement Test or a grade of "C" in ENGL 75ab. **Hours:** (27-54) 3 lect/discussion/lab for 9 weeks per 1.5 units. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

ENGL 77abc  WRITING PRACTICE FOR FOREIGN AND BICULTURAL AMERICAN STUDENTS (1-3 units)*
77a—77b—77c equivalent to 77abc. Recommended for foreign and bicultural American students who still need to develop control of grammar and usage in order to advance into ENGL 60. Emphasizes grammar review, extensive sentence writing, vocabulary and idiom development and paragraph writing. **Prerequisite:** Completion of ENGL 75ab and ENGL 75cd OR placement based on the Bakersfield College English as a Foreign Language Placement Test OR recommendation by any Bakersfield College English instructor. **Hours:** (30-90) 5 lect/writing, 6 weeks per unit. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

ENGL 77def  INTERMEDIATE WRITING PRACTICE FOR FOREIGN AND BICULTURAL AMERICAN STUDENTS (3 units)*
77d—77e—77f (1—1—1 unit) equivalent to 77def. Recommended for foreign and bicultural American students who need further practice with grammar and usage in order to advance into ENGL 60. Emphasizes grammar review, and sentence and paragraph writing. **Prerequisite:** Completion of ENGL 75ab and ENGL 75cd OR placement based on the Bakersfield College English as a Foreign Language Placement Test OR recommendation by any Bakersfield College English instructor. **Hours:** (18-54) 3 lect/writing, 6 weeks per unit. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

ENGL 260  BASIC USAGE AND GRAMMAR (4 units)
Self-paced open entry/open exit. For description, see ENGL 60.

ENGL 264  LANGUAGE STUDY AND VOCABULARY DEVELOPMENT (3 units)
Self-paced open entry/open exit. For description, see ENGL 64.

ENGL S  SPELLING IMPROVEMENT (1 unit)
A course in basic spelling, including the use of the apostrophe. Open to all students. **Prerequisite:** None. **Hours:** (18) 1 lect. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

*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, speech, and reading courses at the intermediate and advanced levels as well as special sections of regular English and learning skills courses.

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.

ENGL 60 BASIC USAGE AND GRAMMAR (4 units)
Special section of English 60 for bilingual/bicultural students.

ENGL 63 BEGINNING VOCABULARY DEVELOPMENT (3 units)

ENGL 75a—75b LOW INTERMEDIATE ENGLISH AS A FOREIGN LANGUAGE (2—2 units)

ENGL 75c—75d INTERMEDIATE ENGLISH AS A FOREIGN LANGUAGE (1.5—1.5 units)

ENGL 77abc WRITING PRACTICE FOR FOREIGN AND BICULTURAL AMERICAN STUDENTS (1—3 units)

ENGL 77def INTERMEDIATE WRITING PRACTICE FOR FOREIGN AND BICULTURAL AMERICAN STUDENTS (1—3 units)
LEARNING SKILLS MODULES FOR EFL* STUDENTS

LRN S 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.

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.

READING COURSE FOR EFL* STUDENTS

For course description of below Reading course, see Reading course listings.

RDNG 72 READING FOR FOREIGN AND BILINGUAL STUDENTS (3 units)
RDNG 73 INTERMEDIATE READING FOR FOREIGN AND BILINGUAL STUDENTS (3 units)

SPEECH COURSES FOR EFL* STUDENTS

For course descriptions of below Speech courses, see Speech course listings.

SPCH 18 VOICE AND DICTION (3 units)

Advanced instruction in speech production for greater fluency. For course description, see Speech 18.

SPCH 57ab SPECIAL PROBLEMS IN ENGLISH PRONUNCIATION FOR BILINGUAL/BICULTURAL STUDENTS (1.5—1.5 units)

SPCH 57cd SPECIAL PROBLEMS IN ENGLISH PRONUNCIATION FOR BILINGUAL/BICULTURAL STUDENTS (1.5—1.5 units)

SPCH 75a—75b INTERMEDIATE LISTENING/SPEAKING ENGLISH AS A FOREIGN LANGUAGE (2—2 units)

SPCH 75c—75d INTERMEDIATE LISTENING/SPEAKING ENGLISH AS A FOREIGN LANGUAGE (1.5—1.5 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

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability; **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. **NOTE:** If repeatability is not shown, course may not be repeated.

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.

**HIST 20a—20b  BLACK HISTORY (3—3 units)**
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. **Prerequisite:** Reading Level 1. **Hours:** (54—54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.
CHICANO STUDIES

CH ST 24  LATINAS IN THE UNITED STATES (2 units)
A survey of the changing psychological and social conditions of Latinas as they pertain
to the economic, political, and family developments within the Hispanic cultural con­
text. An analysis of specific issues such as housing, health, and employment will be
made in their specific relationships with Latinas in relation to the broad areas of the
economy, the family and politics. **Prerequisite:** Reading Level 1. **Hours:** (36) 2
lect/discussion. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and
Private Colleges. **Note:** Not open to students with credit in GN ST 24.

CH ST 30a  EARLY CHICANO HISTORY (3 units)
A survey of the history of the peoples of the Mexican-American borderlands, from
Pre-Columbian times until 1848. Examines the social, economic, and political evolu­
tion of the region with emphasis upon the inter-relationships between the histories of
the United States and Mexico. Fulfills code requirements in U.S. Constitution,
American history and institutions. **Prerequisite:** Reading Level 1. **Hours:** (54) 3
lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.
**Note:** Not open to students with credit in HIST 30a.

CH ST 30b  HISTORY OF CHICANOS IN THE SOUTHWEST (3 units)
A survey of the Chicanos with an emphasis on the development of California and the
Southwest from 1848 to the present. Examines the aftermath of the U.S.-Mexican War,
1846-1848; the inter-relationship of Mexican and U.S. history between 1860 and 1910;
the effects of the Mexican Revolution of 1910 on the 20th Century experience of
Chicanos in the U.S.; and the California State Constitution. Fulfills code requirements in
California state and local government. **Prerequisite:** Reading Level 1. **Hours:** (54) 3
lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.
**Note:** Not open to students with credit in HIST 30b.

CH ST 33  HISTORY OF LATIN AMERICA (3 units)
A survey of Ibero-American societies from ancient Amerindian cultures through
Spanish and Portuguese colonial societies to nineteenth and twentieth century nation
states. Emphasizes the political, social, and economic institutions of these Latin
American societies. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:**
Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges. **Note:** Not open
to students with credit in HIST 33.

CH ST 36  SOCIOLOGY OF THE CHICANO (3 units)
A survey of the socioeconomic characteristics of the Chicano community in the United
States. Emphasizes the inter-relationships of Chicanos and society including the
development of assimilation, minority status, and Chicano culture. **Prerequisite:**
Reading Level 1. English Level 3. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and
Sciences. **Transferable:** UC, CSU and Private Colleges. **Note:** Not open to students
with credit in SOC 36.
CH ST 36L  FIELDWORK IN CHICANO SOCIOLOGY (2 units)
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. Prerequisite:
Reading Level 1. Hours: (108) 2 lect-seminar and 4 field work. CCS: Liberal Arts and
Sciences. Transferable: CSU and Private Colleges. Credit limitations. For specific in-
formation see counselor. Note: Not open to students with credit in SOC 36L.

CH ST 38a–38b–38c  TOPICS
IN BILINGUAL EDUCATION (1–1–1 unit)
Develops history 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. Prerequisite: Reading
Level 1. Hours: (18-18-18) 3 lect/discussion for 6 weeks. CCS: Liberal Arts and

RELATED ETHNIC STUDIES COURSES

HIST 20a–20b  BLACK HISTORY (3–3 units)
A survey of the political, economic, and cultural history of the United States from
earliest colonial times to present. A history of the role and contribution of the Black
American from African beginnings to the present. The first semester (to 1877) includes
a study of the U.S. Constitution, and federal government. The second semester (since
1877) includes a study of the state and local government of California. The two
semesters fulfill the “American History and Institutions Requirement” at state colleges
and universities. Prerequisite: Reading Level 1. 20a is not a prerequisite for 20b.
Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and
Private Colleges.

HIST 33  HISTORY OF LATIN AMERICA (3 units)
A survey of Ibero-American societies from ancient Amerindian cultures through
Spanish and Portuguese colonial societies to nineteenth and twentieth century nation
states. Emphasizes the political, social, and economic institutions of these Latin
American societies. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS:
Liberal Arts and Sciences. Transferable: CSU and Private Colleges. Note: Not open
to students with credit in CH ST 33.

HIST 36  HISTORY OF NATIVE AMERICANS (3 units)
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. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. **Note:** Offered only occasionally.

**PSYCH 28  PSYCHOLOGY OF ETHNIC IDENTITY (3 units)**
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, inter-group relations and the minority reaction to dominance. **Prerequisite:** Reading Level 1; English Level 2. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

**SPCH 31a—31b—31c—31d PERSUASION IN A DEMOCRATIC SOCIETY (1.5—1.5—1.5—1.5 units)**
**Prerequisite:** Eligibility for ENGL 1a; Reading Level 1. **Hours:** (27 each) Each 3 lect/discussion for 9 weeks. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

**SPCH 31a  FREEDOM OF EXPRESSION**
Instruction in the analysis and evaluation of constitutional guarantees of freedom of expression. Instruction in the historical development of freedom of expression, obscenity, legal liabilities. Emphasizes freedom of expression in radio, television and politics.

**SPCH 31b  FREEDOM OF SPEECH**
Instruction in the analysis and evaluation of constitutional guarantees of freedom of speech. Instruction in the historical background, regulation of time, place and manner, legal protection of the speaker and free speech on college campuses. Emphasizes responsibilities involved in freedom of speech in contemporary American society.

**SPCH 31c  THE RHETORIC OF AGITATION**
Instruction in the techniques of agitation and revolution with emphasis on the rhetoric of conflict in both formal and informal discourse. Instruction in the values and dangers of agitation. Emphasizes the effect of agitation on decision making in a democratic society.

**SPCH 31d  INTERRACIAL COMMUNICATION**
Instruction in cultural conflict and confrontation. Instruction in basic communication problems within a multi-racial, multi-cultural society. Emphasizes face-to-face interracial difficulties.
The Family and Consumer Education Department offers students the opportunity to select among several career programs. The department also offers courses which provide lower division credit for majors transferring to baccalaureate programs.

The student may develop a program of study leading to a specific career certificate goal, the Associate in Science degree, the Associate in Arts degree, or lower division courses that lead to the baccalaureate degree in Home Economics, Child Development, Foods and Nutrition, Interior Design, or K-12 teaching credentials.

CERTIFICATES OF ACHIEVEMENT

These programs are designed for those who prefer career specialization and the earliest possible opportunity for job placement and/or small business enterprise. Students wishing greater in-depth preparation may continue toward advanced courses and the associate degree.

Programs offering these occupational certificates include: Fashions/Textiles, Cook Apprentice, Cosmetology, Dietary Managers, Interior Design, California State Dietetic Service Supervisor.

Each program consists of basic requirements and suggested electives. Electives may be selected to achieve personalized educational objectives.

Upon completion of requirements, the student may apply for a Certificate of Achievement. Certificates are awarded upon approval by program coordinators and the department chairperson.
CALIFORNIA STATE DIETETIC SERVICE SUPERVISOR CERTIFICATE

A program designed to meet the minimum qualification requirements of the California State approved program for dietetic service supervisors approved by the California State Department of Health Services. Students are encouraged to continue their training and education toward the Dietary Managers Certificate.

Minimum units required in discipline – 18

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD SV 51a</td>
<td>Food Serv Skills Dev</td>
<td>1.0</td>
<td>NUTR 10</td>
<td>Elem Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>FD SV 51b</td>
<td>Food Prep/Theory</td>
<td>3.0</td>
<td>FD SV 64a</td>
<td>Hlth Care Fd Sv Op</td>
<td>1 3.0</td>
</tr>
<tr>
<td>FD SV 52</td>
<td>Sanitation/Safety</td>
<td>2.0</td>
<td>FD SV 64b</td>
<td>Hlth Care Fd Sv Op</td>
<td>2 3.0</td>
</tr>
<tr>
<td>FD SV 58</td>
<td>Supervisory Techniqs</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

COOK APPRENTICE CERTIFICATE

This three-year program is designed to fulfill the academic requirements of the American Culinary Federation Institute’s Apprenticeship Training Program for Chefs. Students are required to complete 2,000 hours of specified work per year for three years for a total of 6,000 hours in addition to the academic program. Eligibility of candidates for the program is determined by the selection committee of the Chef de Cuisine Association of Bakersfield.

Minimum units required in discipline – 26

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD SV 1</td>
<td>Intro Food Serv Ind</td>
<td>1.0</td>
<td>FD SV 55</td>
<td>Advanced Baking</td>
<td>2.0</td>
</tr>
<tr>
<td>FD SV 51a</td>
<td>Food Serv Skills Dev</td>
<td>1.0</td>
<td>FD SV 57</td>
<td>Purchasing</td>
<td>3.0</td>
</tr>
<tr>
<td>FD SV 51b</td>
<td>Food Prep/Theory</td>
<td>3.0</td>
<td>FD SV 58</td>
<td>Supervisory Techniqs</td>
<td>3.0</td>
</tr>
<tr>
<td>FD SV 52</td>
<td>Sanitation/Safety</td>
<td>2.0</td>
<td>FD SV 60</td>
<td>Menu Plng/Mktg/Cost</td>
<td>3.0</td>
</tr>
<tr>
<td>FD SV 53</td>
<td>Garde Manger/Buffet</td>
<td>2.0</td>
<td>NUTR 10</td>
<td>Elem Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>FD SV 54</td>
<td>Clas/Internl Cuisine</td>
<td>3.0</td>
<td></td>
<td></td>
<td></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.
CULINARY ARTS CERTIFICATE

The Culinary Arts Certificate Program emphasizes the theory and practice of food preparation and service involved in commercial and institutional food service operations. Through work station rotations in the training facilities and work experience in various types of food service operations related to their individual interest, students are exposed to all aspects of the front and back of the house operations which will prepare them for entry level positions as cooks, pantry workers, assistant bakers, cook’s helpers and dining room servers. Students may apply certificate credits to an Associate Degree in the Food Service Management Program.

Minimum units required in discipline – 28

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD SV 1</td>
<td>1.0</td>
<td>Intro Food Serv Ind</td>
<td>FD SV 54</td>
</tr>
<tr>
<td>FD SV 50abc</td>
<td>2-6.0</td>
<td>Coop Wrk Exp Ed</td>
<td>FD SV 57</td>
</tr>
<tr>
<td>FD SV 51a</td>
<td>1.0</td>
<td>Food Serv Skills Dev</td>
<td>FD SV 58</td>
</tr>
<tr>
<td>FD SV 51b</td>
<td>3.0</td>
<td>Food Prep/Theory</td>
<td>NUTR 10</td>
</tr>
<tr>
<td>FD SV 51c</td>
<td>3.0</td>
<td>Restaurant Operatns</td>
<td></td>
</tr>
<tr>
<td>FD SV 52</td>
<td>2.0</td>
<td>Sanitation/Safety</td>
<td></td>
</tr>
<tr>
<td>FD SV 53</td>
<td>2.0</td>
<td>Garde Manger/Buffet</td>
<td></td>
</tr>
</tbody>
</table>

DIETARY MANAGERS CERTIFICATE

The Dietary Managers Certificate 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 program is approved by the Dietary Managers Association. A Dietary Manager Certificate of Achievement is given to all students completing the program. Upon successful completion of the program, students may apply for membership in the Dietary Managers Association.

Minimum units required in discipline – 28

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD SV 50abc</td>
<td>1-3.0</td>
<td>Coop Wrk Exp Ed</td>
<td>FD SV 58</td>
</tr>
<tr>
<td>FD SV 1</td>
<td>1.0</td>
<td>Intr Food Serv Ind</td>
<td>FD SV 60</td>
</tr>
<tr>
<td>FD SV 51a</td>
<td>1.0</td>
<td>Food Serv Skills Dev</td>
<td>FD SV 64a</td>
</tr>
<tr>
<td>FD SV 51b</td>
<td>3.0</td>
<td>Food Prep/Theory</td>
<td>NUTR 10</td>
</tr>
<tr>
<td>FD SV 52</td>
<td>2.0</td>
<td>Sanitation/Safety</td>
<td>FD SV 64b</td>
</tr>
<tr>
<td>FD SV 57</td>
<td>3.0</td>
<td>Purchasing</td>
<td>FD SV</td>
</tr>
</tbody>
</table>
FASHIONS/TEXTILES CERTIFICATE

The Fashions and Textiles Certificate of Achievement Program prepares students to enter the expanding field of clothing construction and alterations.

Minimum units required in discipline – 24

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASH 9</td>
<td>Cloth Constructn 1</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 10</td>
<td>Cloth Constructn 2</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 24</td>
<td>Textiles/Fashions</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 12</td>
<td>Tailoring 1</td>
<td>2.0</td>
</tr>
<tr>
<td>FASH 53</td>
<td>Custom Fit/Altertns</td>
<td>2.0</td>
</tr>
<tr>
<td>FASH 13</td>
<td>Tailoring 2</td>
<td>2.0</td>
</tr>
<tr>
<td>FASH 23</td>
<td>Apparel Selection</td>
<td>0.5</td>
</tr>
<tr>
<td>FASH 51</td>
<td>Beginning Sewing</td>
<td>1.5</td>
</tr>
<tr>
<td>FASH 52</td>
<td>Intermediate Sewing</td>
<td>1.5</td>
</tr>
<tr>
<td>FASH 54</td>
<td>Garnt Dsgn/Constr</td>
<td>12.0</td>
</tr>
<tr>
<td>FASH 55</td>
<td>GrmntDsgn/Constr</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Electives – Minimum of 11 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASH 76</td>
<td>76h Overlock Techniques</td>
<td>1.0</td>
</tr>
<tr>
<td>BUS 40</td>
<td>Personal Finance</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 251</td>
<td>Business Math</td>
<td>3.0</td>
</tr>
<tr>
<td>Work Experience</td>
<td></td>
<td>4.0</td>
</tr>
<tr>
<td>FASH 54</td>
<td>Garnt Dsgn/Constr</td>
<td>12.0</td>
</tr>
<tr>
<td>FASH 55</td>
<td>GrmntDsgn/Constr</td>
<td>2.0</td>
</tr>
</tbody>
</table>

INTERIOR DESIGN CERTIFICATE

The curriculum is designed to prepare students for entry level employment in interior design and related fields.

Minimum units required in discipline – 30

Required Courses

<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/Envr Des</td>
<td>1.0</td>
</tr>
<tr>
<td>INT D 14</td>
<td>Art Tchnqs Prsnttn</td>
<td>1.0</td>
</tr>
<tr>
<td>INT D 15a</td>
<td>Elemnts/Prin Design</td>
<td>3.0</td>
</tr>
<tr>
<td>INT D 15b</td>
<td>Mats/Compons Int D</td>
<td>3.0</td>
</tr>
<tr>
<td>INT D 12</td>
<td>Careers: Prof Pract</td>
<td>2.0</td>
</tr>
<tr>
<td>INT D 21ab</td>
<td>Interior Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>INT D 22</td>
<td>Housing/Envr Dsgn</td>
<td>3.0</td>
</tr>
<tr>
<td>INT D 23ab</td>
<td>Furniture Styles</td>
<td>4.0</td>
</tr>
<tr>
<td>INT D 24</td>
<td>Textiles</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Restrictive Electives* (Minimum of 7 units)

*Seven units must be chosen from the Restrictive Electives listed below. Students may select all seven units from one area of emphasis or may select units from either of the three areas to total seven.
I. General Emphasis

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT D 16</td>
<td>2.0</td>
<td>ART 30a</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 75b</td>
<td>0.5-1.0</td>
<td>OR 30b Medieval Art</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 3ab</td>
<td>3.0</td>
<td>ART 30c Renaissance Art</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 3ef</td>
<td>13.0</td>
<td>W EXP 249 Coop Work Exp Ed</td>
<td>1.0</td>
</tr>
<tr>
<td>ART 3ab</td>
<td>3.0</td>
<td>W EXP 249 Coop Work Exp Ed</td>
<td>1.0</td>
</tr>
</tbody>
</table>

II. Arch/Design Emphasis

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT D 25</td>
<td>3.0</td>
<td>ARCH 6 Materials of Constr</td>
<td>2.0</td>
</tr>
<tr>
<td>ART 3ab</td>
<td>3.0</td>
<td>ARCH 11 Intr Dwg/Perspctv</td>
<td>4.0</td>
</tr>
<tr>
<td>ART 3cd</td>
<td>3.0</td>
<td>ARCH 12 Basic Graphics</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 14cd</td>
<td>3.0</td>
<td>ARCH 21 Fund Envirn Design I</td>
<td>1.0</td>
</tr>
<tr>
<td>IN DR 20a</td>
<td>3.0</td>
<td>ARCH 31 Archit Practice I</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 30a</td>
<td>3.0</td>
<td>INT D 75c Commercial Specs</td>
<td>1.0</td>
</tr>
</tbody>
</table>

III. Retail Sales Emphasis

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT D 75a</td>
<td>1.0</td>
<td>INT D 75c Commercial Specs</td>
<td>1.0</td>
</tr>
<tr>
<td>INT D 75g</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Suggested Courses (Not to be applied to 30 required units.)

- BUS 52 Today's Bus Wrld (3)
- BUS 58 Human Relat/Motivat (3)
- PSYCH 1a General Psychology (3)
- WOOD 1 Beg Handworking (3)
- SPCH 51 General Speech (3)
- ACCTG 53a Intro Accounting 1 (3)
- ACCTG 53b Intro Accounting 2 (3)
- MKTG 62 Fund Persnal Selling (3)

ASSOCIATE DEGREE PROGRAMS

Students may continue their training and education beyond the Certificate of Achievement by taking additional related and general education courses which may lead to an Associate in Science or Associate in 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.
ASSOCIATE IN ARTS DEGREE PROGRAMS

INTERIOR DESIGN

The curriculum is designed to prepare students for employment in interior design and related fields.

Minimum units required in discipline – 21.5

Required Courses

<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/Envr Des</td>
<td>1.0</td>
</tr>
<tr>
<td>INT D 14</td>
<td>Art Tchnqs Prsentn</td>
<td>1.0</td>
</tr>
<tr>
<td>INT D 15a</td>
<td>Elements/Prin ID</td>
<td>3.0</td>
</tr>
<tr>
<td>INT D 15b</td>
<td>Mats/Components ID</td>
<td>3.0</td>
</tr>
<tr>
<td>INT D 16</td>
<td>Measurement/Calculat</td>
<td>2.0</td>
</tr>
<tr>
<td>INT D 21a</td>
<td>Interior Drawing</td>
<td>1.5</td>
</tr>
<tr>
<td>INT D 22</td>
<td>Housing/Envr Design</td>
<td>3.0</td>
</tr>
<tr>
<td>INT D 23ab</td>
<td>Furniture Styles</td>
<td>4.0</td>
</tr>
<tr>
<td>INT D 24</td>
<td>Textiles</td>
<td>3.0</td>
</tr>
</tbody>
</table>

ASSOCIATE IN SCIENCE DEGREE PROGRAM

CHILD DEVELOPMENT AND FAMILY RELATIONS

This program is designed to train students to work 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 (See Course of Study for Children's Center Permit). It is strongly recommended that students in this program work closely with the departmental counselor/advisor.

Minimum units required in discipline – 31

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH DV 13a</td>
<td>Child Growth/Devel</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 13b</td>
<td>Child Growth/Devel</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 33</td>
<td>Survey Special Educ</td>
<td>3.0</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 41a</td>
<td>Prin Early Childhood</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 41b</td>
<td>Pr Early Chlhd Lab</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 41bL</td>
<td>Pr Early Chlhd Lab</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 42</td>
<td>Child/Family/Comnty</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 44</td>
<td>Inft/Todlr Care/Dev</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 44L</td>
<td>Inf/Tod Care/Dv Lab</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 49</td>
<td>Child Health/Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 54</td>
<td>Intro Elem Educ</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Other Suggested Courses

ENGL 35 Childrens Lit/Story (3), CH DV 43 Techniq Parent Educ (3), CH DV 45a Admin Prgms Childrn (3), CH DV 70 Topics Ch Dv (4), FAM S 31 Marriage (3), NUTR 10 Elem Nutrition (3).
Special Education Emphasis

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</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>Emtonly Hndcpd Chld</td>
<td>1.0</td>
</tr>
<tr>
<td>CH DV 35b</td>
<td>Lrng Disabled Child</td>
<td>1.0</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH DV 13a</td>
<td>Child Growth/Devel</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 9</td>
<td>Cloth Constructn 1</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 10</td>
<td>Cloth Constructn 2</td>
<td>3.0</td>
</tr>
<tr>
<td>FAM S 31</td>
<td>Marriage</td>
<td>3.0</td>
</tr>
<tr>
<td>FD SV 51b</td>
<td>Food Prep/Theory</td>
<td>3.0</td>
</tr>
<tr>
<td>FD SV 1</td>
<td>Intr Food Serv Ind</td>
<td>1.0</td>
</tr>
<tr>
<td>FD SV 52</td>
<td>Sanitation/Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>FD SV 51a</td>
<td>Food Serv Skills Dev</td>
<td>1.0</td>
</tr>
<tr>
<td>INT D 1</td>
<td>Intr Inter/Envr Des</td>
<td>1.0</td>
</tr>
<tr>
<td>INT D 15a</td>
<td>Elements/Princ ID</td>
<td>3.0</td>
</tr>
<tr>
<td>INT D 15b</td>
<td>Mat Cmp/Int Dsgn</td>
<td>3.0</td>
</tr>
<tr>
<td>INT D 24</td>
<td>Textiles</td>
<td>3.0</td>
</tr>
<tr>
<td>NUTR 10</td>
<td>Elem Nutrition</td>
<td>3.0</td>
</tr>
</tbody>
</table>

FOOD SERVICE MANAGEMENT

The food service industry, being the largest retail employer in the U.S., offers limitless job opportunities. Programs are designed to provide necessary educational background and practical experiences which will qualify graduates for numerous positions having production, sales and service, and mid-management responsibilities in commercial and institutional food service operations. Typical opportunities for graduates are soup chef, pastry chef, purchasing agent, broiler cook, assistant manager and for training positions with franchise and chain operations. Students must comply with the requirements as shown in the catalog under Graduation Requirements.

Minimum units required in discipline — 36
Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD SV 50abc</td>
<td>Coop Wrk Expr Ed</td>
<td>4-12.0</td>
</tr>
<tr>
<td>FD SV 1</td>
<td>Intr Food Serv Ind</td>
<td>1.0</td>
</tr>
<tr>
<td>FD SV 51a</td>
<td>Food Serv Skills Dev</td>
<td>1.0</td>
</tr>
<tr>
<td>FD SV 51b</td>
<td>Food Prep/Theory</td>
<td>3.0</td>
</tr>
<tr>
<td>FD SV 51c</td>
<td>Restaurant Operatns</td>
<td>3.0</td>
</tr>
<tr>
<td>FD SV 52</td>
<td>Sanitation/Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>FD SV 53</td>
<td>Garde Manger/Buffet</td>
<td>2.0</td>
</tr>
<tr>
<td>FD SV 54</td>
<td>Clas/Internl Cuisine</td>
<td>3.0</td>
</tr>
<tr>
<td>FD SV 55</td>
<td>Advanced Baking</td>
<td>2.0</td>
</tr>
<tr>
<td>FD SV 57</td>
<td>Purchasing</td>
<td>3.0</td>
</tr>
<tr>
<td>FD SV 58</td>
<td>Supervisory Tecniqs</td>
<td>3.0</td>
</tr>
<tr>
<td>FD SV 60</td>
<td>Menu Plng/Mktg/Cost</td>
<td>3.0</td>
</tr>
<tr>
<td>NUTR 10</td>
<td>Elem Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT 43</td>
<td>Prin Organiz/Mngt</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 as electives at California State Universities/Colleges as well as fulfilling all the requirements for the associate degree from Bakersfield College.

CHILD DEVELOPMENT

A major in Child Development can lead to a profession in teaching, business, and human service areas.

Suggested Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH DV 13a</td>
<td>Child Growth/Devel</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 13b</td>
<td>Child Growth/Devel</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 33</td>
<td>Survey Special Educ</td>
<td>3.0</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 41a</td>
<td>Princ Early Childhood</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 41aL</td>
<td>Pr Early Chldhd Lab</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 41b</td>
<td>Princ Early Childhood</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 42</td>
<td>Chld/Family Comnty</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 44</td>
<td>Inf/Todlr Care/Dev</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 44L</td>
<td>Inf/Tod Care/Dv Lab</td>
<td>2.0</td>
</tr>
</tbody>
</table>

INTERIOR DESIGN

Designed for students preparing for professional careers in teaching and business. The degree is the Bachelor of Arts with a major in Interior Design.

Suggested Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT D 15a</td>
<td>Elements/Prin ID</td>
<td>3.0</td>
</tr>
<tr>
<td>INT D 15b</td>
<td>Mats/Components ID</td>
<td>3.0</td>
</tr>
<tr>
<td>INT D 21a</td>
<td>Interior Drawing</td>
<td>1.5</td>
</tr>
<tr>
<td>INT D 21b</td>
<td>Interior Drawing</td>
<td>1.5</td>
</tr>
<tr>
<td>INT D 22</td>
<td>Housing/Envir Dsgn</td>
<td>3.0</td>
</tr>
<tr>
<td>INT D 23a</td>
<td>Furniture Styles</td>
<td>2.0</td>
</tr>
<tr>
<td>INT D 23b</td>
<td>Furniture Styles</td>
<td>2.0</td>
</tr>
<tr>
<td>INT D 20a</td>
<td>Cmp Asst Drftg/Dsgn</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 30a</td>
<td>Industrial Drawing</td>
<td>3.0</td>
</tr>
</tbody>
</table>
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.

A. Children’s Center Permit requirements:

1. 24 units in approved Child Development courses, with a grade of “C.”
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).
5. A Proficiency Test, AS Degree and C.D.A. (Child Development Associate).

B. Required Courses - 14 units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH DV 13a</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 42</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 41a</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 41aL</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 41b</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 41bL</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 42</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 44</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 44L</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 45a</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 70</td>
<td>1.0</td>
</tr>
<tr>
<td>CH DV 49</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Recommended Electives — Minimum of 10 units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH DV 13b</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 33</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 40a</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 40b</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 40c</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 49</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 43</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 44</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 44L</td>
<td>2.0</td>
</tr>
<tr>
<td>CH DV 45a</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 70</td>
<td>1.0</td>
</tr>
<tr>
<td>CH DV 49</td>
<td>2.0</td>
</tr>
</tbody>
</table>

(CH DV 70 courses are provided as update courses for those teachers already licensed.)

Special Education Emphasis

Students wishing to place an emphasis on Special Education should take the following courses as part of the 10 units required for Electives.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH DV 34</td>
<td>3.0</td>
</tr>
<tr>
<td>CH DV 35a</td>
<td>1.0</td>
</tr>
<tr>
<td>CH DV 35b</td>
<td>1.0</td>
</tr>
<tr>
<td>CH DV 35c</td>
<td>1.0</td>
</tr>
<tr>
<td>CH DV 35d</td>
<td>1.0</td>
</tr>
<tr>
<td>CH DV 35e</td>
<td>1.0</td>
</tr>
<tr>
<td>CH DV 35f</td>
<td>1.0</td>
</tr>
</tbody>
</table>

(CH DV 70 courses are provided as update courses for those teachers already licensed.)
School Age Emphasis

Students wishing to place an emphasis on School Age Childcare should take the following courses as part of the 10 units required for Electives.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH DV 13b Child Growth/Devel</td>
<td>3.0</td>
<td>CH DV 68d Curric III: Sch Age</td>
<td>1.0</td>
</tr>
<tr>
<td>CH DV 68a Ages/Stgs Dv Sch Age</td>
<td>1.0</td>
<td>CH DV 68e Disc/Sch Age Child</td>
<td>1.0</td>
</tr>
<tr>
<td>CH DV 68b Curric 1:Sch Age Child</td>
<td>1.0</td>
<td>CH DV 41c Prin/Prac/Day Care</td>
<td>4.0</td>
</tr>
<tr>
<td>CH DV 68c Curric II: Sch Age Chld</td>
<td>1.0</td>
<td>CH DV 40d Creat Act/Sch Age</td>
<td>2.0</td>
</tr>
</tbody>
</table>

C. Lab Days Contributing to one-year experience requirement (100 days).

- CH DV 41aL - 36 days (3 hrs/day)
- CH DV 44L - 36 days (2 hrs/day)
- CH DV 34 - 36 days (2 hrs/day)

Documented work experience may be used. Check with your advisor.

D. General Education Requirements - 16 units

Units must be taken in each of the following areas: English, Math/Science, History and Humanities. NUTR 10 Elem Nutrition (3 units) is a recommended science course; ENGL 35, Children’s Lit/Story (3 units) is a recommended Humanities course.
The following courses are recommended for infant-toddler teachers:

<table>
<thead>
<tr>
<th>UN</th>
<th>CH DV 44  Inft/Todlr Care/Dev 2.0</th>
<th>UN</th>
<th>CH DV 44L lnf/Tod Care/Dv Lab2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH DV 49</td>
<td>Child Health/Safety 2.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(CH DV 70 courses are provided as update courses for those teachers already licensed.)

**Experience Requirement:**

At least 3 hours/day of work (volunteer or paid) with children, for a minimum of 50 days within a six-month period fulfills the experience requirement.

*Requirements for Emergency Approval*

The California Department of Social Services will give emergency approval to teachers who, prior to employment, have completed six semester units in Child Development.

CH DV 13a Child Growth and Development (3 units) is recommended along with any courses listed above.

After employment, a teacher working with an emergency approval must pass 2 units per semester from the list above until the 12 required units to be fully qualified are earned.

The above regulations are the minimum required in private nursery schools. Many schools have set their teacher education requirements at a higher level.

**COURSE DESCRIPTIONS**

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability; **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. **NOTE: If repeatability is not shown, course may not be repeated.**

**CHILD DEVELOPMENT**

**CH DV 10  THE GROWING YEARS (3 units)**
Recommended for parents or future parents. Interplay of biological factors, human interactions, social structure, and other environment factors which affect the shaping of a child from conception through adolescence. **Prerequisite:** Reading Level 1. **Hours:** 30 TV lessons, 1 orientation, 2 review sessions, 2 test sessions. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.
CH DV 13a  CHILD GROWTH AND DEVELOPMENT (3 units)
The developing child from conception through adolescence with an emphasis on ages two through five years. Includes major theories of emotional, social, physical, and cognitive development. **Prerequisite:** Reading Level 1. **Hours:** (72) 3 lect, 1 hour per week observation in Child Study Center. **CCS:** Occupational Education. **Transferable:** UC, CSU and Private Colleges. Credit limitations. For specific information see counselor.

CH DV 13b  CHILD GROWTH AND DEVELOPMENT (3 units)
Physical, intellectual, emotional, and social development of the school age child through adolescence. Major theories of human development and the influences of the family, peers, school, and puberty. **Prerequisite:** CH DV 13a with a grade of "C." **Hours:** (72) 3 lect, 1 hour per week observation. **CCS:** Occupational Education. **Transferable:** UC, CSU and Private Colleges. Credit limitations. For specific information see counselor.

CH DV 32  DESIGNING A MULTICULTURAL CURRICULUM (2 units)
Philosophy, materials and techniques necessary for designing a multicultural curriculum for young children, including examination of the relationship between critical aspects of culture and the personality development of children, adolescents, and adults. **Prerequisite:** Recommended Reading Level 1. **Hours:** (36) 2 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

CH DV 33  SURVEY OF SPECIAL EDUCATION (3 units)
Introduction to special education in the public schools. Emphasizes legal aspects, assessment and placement. Includes examination of all disabilities served in the public schools and day care settings and the role of child care professionals and paraprofessionals in the field of special education. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

CH DV 34  PRINCIPLES AND PRACTICES IN SPECIAL EDUCATION (3 units)
Practicum experience for students entering the field of special education or persons interested in working as an instructional aide in a special education setting. Includes disabilities served by the public schools system, deaf, blind, visually impaired, hard of hearing, mentally retarded, multihandicapped, autistic, seriously emotionally disturbed, speech impaired, and other health related problems. **Prerequisite:** CH DV 33. **Hours:** (108) 2 lect, 4 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

CH DV 35a  UNDERSTANDING THE EMOTIONALLY HANDICAPPED CHILD (1 unit)
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. **Prerequisite:** Reading Level 1. **Hours:** (18) 2 lect for 9 weeks. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.
CH DV 35b  UNDERSTANDING THE LEARNING DISABLED CHILD (1 unit)
Types of learning disabilities of children will be recognized. Students will learn remedial techniques used with students having learning disabilities. Prerequisite: Reading Level 1. Hours: (18) 2 lect for 9 weeks. CCS: Occupational Education. Transferable: CSU and Private Colleges.

CH DV 35c  UNDERSTANDING THE DEVELOPMENTALLY DISABLED CHILD (1 unit)
Presents the history of mental retardation and defines mental retardation in relation to child development. Studies teaching techniques for levels of retarded children. Prerequisite: Reading Level 1. Hours: (18) 2 lect for 9 weeks. CCS: Occupational Education. Transferable: CSU and Private Colleges.

CH DV 35d  UNDERSTANDING THE PHYSICALLY HANDICAPPED CHILD (1 unit)
Studies physical handicaps of children and the characteristics of those handicaps. Explains mainstreaming and those responsibilities of teacher, parent, and specialist. Prerequisite: Reading Level 1. Hours: (18) 2 lect for 9 weeks. CCS: Occupational Education. Transferable: CSU and Private Colleges.

CH DV 35e  WORKING WITH AUTISTIC CHILDREN (1 unit)
Practical application of behavior modification techniques. Prerequisite: Reading Level 1. Hours: (18) 2 lect for 9 weeks. CCS: Occupational Education. Transferable: CSU and Private Colleges.

CH DV 40a  CREATIVE ACTIVITIES FOR YOUNG CHILDREN (2 units)
Materials and techniques in teaching creative activities to young children. Developing creativity will be emphasized. This course meets Child Development Associate option, competency No. 7. Prerequisite: Reading Level 1. Hours: (36) 2 lect/demo. CCS: Occupational Education. Transferable: CSU and Private Colleges. Credit limitations. For specific information see counselor.

CH DV 40b  MUSIC ACTIVITIES FOR YOUNG CHILDREN (2 units)
Music, teaching techniques and materials appropriate to the growth and development of young children. This course meets Child Development Associate option, competency No. 7. Prerequisite: Reading Level 1. Hours: (36) 2 lect/demo. CCS: Occupational Education. Transferable: CSU and Private Colleges. Credit limitations. For specific information see counselor.

CH DV 40c  MOVEMENT ACTIVITIES FOR YOUNG CHILDREN (2 units)
Movement activities designed to develop gross and fine motor skills and increase self confidence for young children. This course meets Child Development Associate option, competency No. 4. Prerequisite: Reading Level 1. Hours: (36) 2 lect/demonstration. CCS: Occupational Education. Transferable: CSU and Private Colleges. Credit limitations. For specific information see counselor.
CH DV 40d  CREATIVE ACTIVITIES
FOR SCHOOL AGE CHILDREN (2 units)
Art principles and materials appropriate to the artistic, intuitive and perceptual growth
and development of school age children, including creative activities with storytelling,
books, puppets, and nature. **Prerequisite:** Reading Level 1. **Hours:** (36) 2
lect/demonstration. **CCS:** Occupational Education. **Transferable:** CSU and Private
Colleges. Credit limitations. For specific information see counselor.

CH DV 41a  PRINCIPLES AND PRACTICES
IN EARLY CHILDHOOD EDUCATION (2 units)
Basic techniques of working with young children including: promoting self-esteem;
creativity; self-discipline; development of physical and cognitive skills; and planning
appropriate curriculum. **Prerequisite:** CH DV 13a with a grade of “C.” 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. **Hours:** (36) 2 lect. **CCS:** Occu­
pational Education. **Transferable:** CSU and Private Colleges.

CH DV 41aL  LABORATORY FOR PRINCIPLES
AND PRACTICES IN EARLY CHILDHOOD EDUCATION (2 units)
Supervised laboratory experience working with children two to five years of age in the
Child Study Centers applying knowledge gained in CH DV 41a. **Prerequisite:** CH
DV 13a with a grade of “C.” CH DV 41aL should be taken concurrently. **Hours:** (108)
6 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

CH DV 41b  PRINCIPLES AND PRACTICES
IN EARLY CHILDHOOD EDUCATION (2 units)
Advanced skills and knowledge for early childhood programs. Planning learning ex­
periences and developing teaching materials appropriate to the physical, cognitive, social
and emotional growth of the young child aged two to five. **Prerequisite:** CH DV 41a
with a grade of “C.” CH DV 41bL should be taken concurrently. **Hours:** (36) 2 lect/dis­
cussion. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and
Private Colleges.

CH DV 41bL  LABORATORY FOR PRINCIPLES
AND PRACTICES IN EARLY CHILDHOOD EDUCATION (2 units)
Advanced laboratory experience and practice teaching in early childhood programs.
Emphasizes curriculum and activity planning, and teaching techniques for three to five
year olds. **Prerequisite:** CH DV 41aL with a grade of “C.” CH DV 41bL should be taken concurrently. **Hours:** (108) 6 lab. **CCS:** Occupational Education. **Transfer­
able:** CSU and Private Colleges.

CH DV 41c  PRINCIPLES AND PRACTICES
IN EXTENDED DAY PROGRAMS (4 units)
Curriculum development and techniques for working with school age children, five to
eighteen. Activities and equipment for extended day programs, as well as methods of
developing self-control, solving conflicts, and working with families. **Prerequisite:**
CH DV 13b. **Hours:** (144) 2 lect/discussion, 6 lab. **CCS:** Occupational Education.
**Transferable:** CSU and Private Colleges.
CH DV 42  CHILD, FAMILY AND THE COMMUNITY (3 units)
Socialization influences of the family, school, day care facilities, peer group, racial and ethnic groups, mass media, and community on children's growth. **Prerequisite:** CH DV 13a with a grade of "C." **Hours:** (54) 3 lect. Field trips are required. **CCS:** Occupational Education. **Transferable:** UC, CSU and Private Colleges.

CH DV 43  TECHNIQUES OF PARENT EDUCATION (2 units)
The philosophy, materials, and techniques necessary for a viable parent education program for parents of young children, including conducting group discussions, parent meetings and conferences, developing parents' self-esteem and participation. Developing teacher communication skill will be emphasized. **Prerequisite:** Reading Level 1. **Hours:** (36) 2 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

CH DV 44  INFANT/TODDLER CARE AND DEVELOPMENT (2 units)
Infant/toddler development — physical, emotional, social and intellectual. Principles of child care, nutrition, health practices, and curriculum for children ages birth through two years. **Prerequisite:** CH DV 13a with a grade of "C." CH DV 44L should be taken concurrently. **Hours:** (36) 2 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

CH DV 44L  LABORATORY FOR INFANT/TODDLER CARE AND DEVELOPMENT (2 units)
Supervised laboratory experience in an infant/toddler center. Application of knowledge gained in CH DV 44. Class discussion of experiences with infants and toddlers in the Child Study Center. **Prerequisite:** CH DV 13a with a grade of "C." Concurrent enrollment in CH DV 44. **Hours:** (90) 1 lect/discussion, 4 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

CH DV 45a  ADMINISTRATION OF PROGRAMS FOR YOUNG CHILDREN: BUSINESS PROCEDURES (3 units)
Administration of programs for young children including private and publicly-funded day-care centers and preschool programs, emphasizing business procedures. **Prerequisites:** CH DV 41a with a grade of "C." CH DV 41b is strongly recommended. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** UC, CSU and Private Colleges.

CH DV 45b  ADMINISTRATION OF PROGRAMS FOR YOUNG CHILDREN: PERSONNEL MANAGEMENT PROCEDURES (3 units)
Administration of programs for young children including private and publicly-funded day-care centers and preschool programs. Emphasizes personnel management. **Prerequisite:** CH DV 45a with a grade of "C." **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** UC, CSU and Private Colleges.

CH DV 46  CHILD ABUSE AND NEGLECT (3 units)
Examination of the dimensions of child abuse and neglect and the public and private systems that respond to families experiencing this problem. Discussion topics include: history of abuse and neglect (physical, social, emotional), theoretical explanations for
abusive behavior, the impact of abuse, issues in treatment and systematic responses. Emphasizes identification of abuse and the child abuse reporting law. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect/discussion. **CCS:** Occupational Education. **Transferable:** UC, CSU and Private Colleges.

**CH DV 47  CHILDREN IN CRISIS (3 units)**
Understanding and recognizing emotional, social, and behavioral manifestations in children likely to experience future emotional and educational problems. Emphasizes identification of high risk groups and development of an appropriate support referral systems for such children. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect/discussion. **CCS:** Occupational Education. **Transferable:** UC, CSU and Private Colleges.

**CH DV 48  INTRODUCTION TO ELEMENTARY EDUCATION (3 units)**
Introductory class for students considering teaching as a profession. Emphasizes career opportunities and issues in education. Requires observations in elementary classroom. **Prerequisite:** Reading Level 1. **Hours:** (72) 3 lect, 1 lab by arrangement. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

**CH DV 49  CHILD HEALTH AND SAFETY (2 units)**
Emphasizes the special needs of preschool children in health and safety. Complies with requirements for Red Cross Multi-Media First Aid Course. Each student receives a Multi-Media First Aid Red Cross card. **Prerequisite:** Reading Level 1. **Hours:** (36) 2 lect. **Repeat:** 3. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

**CH DV 54  INTRODUCTION TO EARLY CHILDHOOD EDUCATION (1 unit)**
Introduction to the history, philosophy and theories of education for young children. Career and educational program planning. Explains credential and license requirements. Satisfies the 0.5 unit counseling requirement for graduation from Bakersfield College. **Prerequisite:** None. **Hours:** (18) 1 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**CH DV 68  TOPICS IN EXTENDED DAY CARE FOR SCHOOL AGE CHILDREN (1 unit)**
Current information for working with the school age child. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (18) 2-4 lect/disc for 1-9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**CH DV 68a  AGES AND STAGES OF DEVELOPMENT OF THE SCHOOL AGE CHILD**
Social, emotional, physical, and intellectual development of the child through the preadolescent years, including planning curriculum and structuring the environment for each stage.
CH DV 68b CURRICULUM I: SCHOOL AGE CHILD
School-age appropriate flannelboard stories, puppets, choral readings and creative dramas. Emphasis is on child participation in preparing materials, such as puppets, stages, costumes, sets and scripts. **Repeat:** 1.

CH DV 68c CURRICULUM II: SCHOOL AGE CHILD
Develops skills in directing team sports, teaching non-competitive games and folk-dancing. Research in the community focusing on field trips, activities, and agencies for school age children. Current information for the school age child. Field trips required.

CH DV 68d CURRICULUM III: SCHOOL AGE CHILD
An exploration of materials, activities, and motivation techniques used in teaching language arts, reading, and math skills to school age children. Tutoring techniques in after-school programs. Coordination of extended day program with the elementary school system.

CH DV 68e DISCIPLINE FOR SCHOOL AGE CHILDREN AND ADOLESCENTS
History, culture and the origin of discipline. Communication and problem solving skills emphasized.

CH DV 70 TOPICS IN CHILD DEVELOPMENT (1.0 unit)
Current information on child development issues and curricula. Recommended as update courses for licensed teachers. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (18) 18 lect/lab per unit. **Repeat:** Repeat as indicated. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CH DV 70b PRESCHOOL CURRICULUM FOR PARENTS. **Repeat:** 3.

CH DV 70c USE OF PUPPETS IN THE CLASSROOM

CH DV 70d DISCIPLINE TECHNIQUES FOR PRESCHOOL CHILDREN

CH DV 70e INFANT CARE
**Repeat:** 3. May be repeated every two years for updating of rules and regulations.

CH DV 70f TODDLER CARE
**Repeat:** 3. May be repeated every two years for updating of rules and regulations.

CH DV 70g PIAGETIAN ACTIVITY

CH DV 70h SCIENCE FOR YOUNG CHILDREN

CH DV 70j COMMUNICATING WITH CHILDREN ABOUT SEXUALITY

CH DV 70k FLANNELBOARD AND STORYTELLING TECHNIQUES.
**Repeat:** 1.

CH DV 70l DRAMATIC PLAY. **Repeat:** 1.

CH DV 70m CREATIVE LEARNING ENVIRONMENT — INSIDE.
CH DV 70n  CREATIVE LEARNING ENVIRONMENT – OUTSIDE.
CH DV 70o  MULTICULTURAL ACTIVITIES FOR YOUNG CHILDREN
CH DV 70p  PORTFOLIO DEVELOPMENT.
Repeat: 3. May be repeated every two years for updating of rules and regulations.
CH DV 70q  MATH AND NUMBER CONCEPTS.
CH DV 70s  ACTIVITIES FOR NUTRITION OF INFANTS/TODDLERS.
CH DV 70t  STAFF DEVELOPMENT TRAINING Repeat: 3.
CH DV 70u  DEVELOPING LANGUAGE & MATH SKILLS Repeat: 1.
CH DV 70v  LEGAL AND ETHICAL ISSUES OF CHILD DEVELOPMENT.
CH DV 70w  FATHERING

CONSUMER EDUCATION

CON E 76  TOPICS IN CONSUMER EDUCATION (1 unit)
Current information on selected areas in consumer education, such as budget management, labeling of foods, buying of clothing and textiles, planning balanced diets/meals, consumer buying of food, credit buying and housing. Prerequisite: None. Hours: (18) 18 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

COSMETOLOGY

COSMT 250  FRESHMAN CLASS (6 units)
Basic science, theory, practical operations, and responsibilities of professional cosmetology. This 200-hour training block is done in the “freshman room.” Topics include: The Cosmetology Act, board rules and regulations, hygiene and good grooming, visual poise, personality development, professional ethics, bacteriology, sterilization and sanitation, draping, shampooing, rinsing, facials and manicuring. Students are required to provide an equipment kit, which may be purchased through the cosmetology school or other professional outlets. Prerequisites: (a) High school diploma or equivalent (b) concurrent enrollment to remedy any inadequate scores on admission tests. Hours: (200) 25 lect/demonstration and 15 lab for 5 weeks. Field trips required. Open entry, open exit. CCS: Occupational Education. Not Transferable: Not degree applicable. Note: Formerly COSMT 50a, COSMT 250a.

COSMT 251  INTERMEDIATE CLASS I (7 units)
Second in a series of continued instruction in basic sciences, theories, practical operations, and responsibilities of professional cosmetology. Practical operations on the “clinic floor” on general public clients. Operations include scalp and hair care, hair shaping, fingerwaving, hairstyling, the care and styling of wigs, eyebrow arching and hair removal. Prerequisite: Satisfactory completion of COSMT 250. Hours: (300) 4-8 lect/demonstration and 16-32 lab for approximately 8-16 weeks. Field trips required. Open entry, open exit. CCS: Occupational Education. Not Transferable: Not degree applicable. Note: Formerly COSMT 50b, 250b.
COSMT 252  INTERMEDIATE CLASS 2 (6 units)
Third in a series of continued instruction in basic sciences, theories, practical operations, and responsibilities of professional cosmetology. Advanced training in the theory room and on the "clinic floor." Topics include: Cosmetology Act and board rules and regulations, bacteriology, permanent waving, hair coloring, hair lightening, chemical hair relaxing, thermal hair straightening, thermal waving, curling and blow dry styling, facial make-up and nail wraps and repair. **Prerequisite:** Satisfactory completion of COSMT 250. **Hours:** (250) 4-9 lect/demonstration and 16-31 lab for approximately 7-13 weeks. Field trips required. Open entry, open exit. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable. **Note:** Formerly COSMT 50c, 250c.

COSMT 253  ADVANCED CLASS I (6 units)
Fourth in a series of continued instruction in basic sciences, theories, practical operations, and responsibilities of professional cosmetology. Practice and preparation for the state board exam. Topics include: Cosmetology act and state board rules and regulations, electrical and light therapy, the nail and disorders of the nail, theory of massage, facials, facial make-up, false eye lashes and chemical straightening. **Prerequisite:** Satisfactory completion of COSMT 250. **Hours:** (250) 4-9 lect/demonstration and 16-31 lab for approximately 7-13 weeks. Field trips required. Open entry, open exit. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable. **Note:** Formerly COSMT 50d, 250d.

COSMT 254  ADVANCED CLASS 2 (5 units)
Fifth in a series of continued instruction in basic sciences, theories, practical operations, and responsibilities of professional cosmetology. Practice and preparation for the State Board Exam. Emphasizes advanced theory and practical operations. Topics include: Cosmetology Act and board rules and regulations, superfluous hair removal, cells, the skin and disorders of the skin, hair and disorders of the scalp and hair. **Prerequisite:** Satisfactory completion of COSMT 250. **Hours:** (200) 4-8 lect/demonstration and 16-32 lab for approximately 5-10 weeks. Field trips required. Open entry, open exit. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable. **Note:** Formerly COSMT 50e, 250e.

COSMT 255  SENIOR CLASS (10 units)
Sixth in a series of continued instruction in basic sciences, theories, practical operations, and responsibilities of professional cosmetology. Practice and preparation for the State Board Exam. Emphasizes advanced theory and practical operations on all topics covered in the prerequisite series. **Prerequisite:** Satisfactory completion of COSMT 250 through 254. **Hours:** (400) 4-8 lect/demonstration and 16-32 lab for approximately 10-20 weeks. Field trips required. Open entry, open exit. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable. **Note:** Formerly COSMT 50f, 250f.
COSMT 256  REMEDIAL INSTRUCTION (1 unit)
Remedial instruction for students who fail to pass the State Board Examination upon completion of the 1600-hour professional cosmetology course. Prerequisites: Completion of Cosmetology 255 and attempt at State Board Examination. Hours: (50) 7-14 lect/demonstration and 13-26 lab for approximately 2-3 weeks. Field trips required. Open entry, open exit. CCS: Occupational Education. Not Transferable: Not degree applicable.

FAMILY STUDIES

FAM S 11  FAMILY PORTRAIT: A STUDY OF CONTEMPORARY LIFE STYLES (3 units)
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. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

FAM S 31  MARRIAGE (3 units)
A basic study of the institution of marriage. Covers some historical aspects of marriage and family life. Emphasizes attitudes, feelings, communication, and adjustment to marriage in a changing society. Prerequisite: Reading Level 1. English Level 1. Hours: (54) 3 lect/disc. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. Note: Not open to students with credit in PSYCH 31.

FAM S 51  FAMILY DAY CARE MANAGEMENT (3 units)
Trains new day care providers in developing a quality program under sound business principles. Emphasizes supervision of a small business. Prerequisite: Reading Level 1. Hours: (54) 4½ lect for 12 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.

FAM S 70  TOPICS IN FAMILY STUDIES (0.5 - 2 units. Limit 8 units.)
Current information on selected areas of Family Studies such as parenting, marriage, family crises. Prerequisite: None. Hours: (9-18) 9 hours per one-half unit. Repeat: 4 or until a limit of 8 units is reached. CCS: Occupational Education. Not Transferable: Associate Degree only.

FAM S 74h  FATHER/CHILD RELATIONSHIPS (0.5 unit)
Designed for the father wishing to improve his parenting skills. Students will learn basic techniques of communication and parenting that help build a close and expressive relationship. Specific suggestions will be made for activities that enhance self-esteem and pleasure of both the father and child. Emphasizes parenting skills for the single or "weekend" father. Prerequisite: Reading Level 1 or evaluation by instructor. Hours: (9) 3 lect Friday evening, 6 lect Saturday. CCS: Liberal Arts and Sciences. Not Transferable: Not degree applicable. Note: Not open to students with credit in GN ST 74h.
FAM S 90  PARENT/CONSUMER EDUCATION (0 units)
Selected areas of family living such as nutrition, canning, quick meals, sewing, decorative arts, toys and activities for young children including parenting skills and problems facing today’s families. Prerequisite: None. Hours: (3-54) 3 lect, 1-18 weeks. Repeat: 3. CCS: Community Education — Parenting. Not Transferable: Not degree applicable.

FASHIONS

FASH 9  CLOTHING CONSTRUCTION I (3 units)
Basic sewing techniques and usage of commercial patterns. Construction of three garments. Pattern and fabric selection based on current fashion trends and correct color, line, and design for the individual. Prerequisite: Reading Level 1. FASH 51 or 52 or evaluation by instructor. Hours: (90) 2 lect, 3 lab. CCS: Occupational Education. Transferable: UC, CSU and Private Colleges.

FASH 10  CLOTHING CONSTRUCTION II (3 units)
Individualizing basic and designer patterns with more intricate detail and style. Alteration principles and techniques of handling fabrics. Advanced color and line techniques. Prerequisite: Reading Level 1. Hours: (90) 2 lect, 3 lab. CCS: Occupational Education. Transferable: UC, CSU and Private Colleges.

FASH 12  TAILORING I (2 units)
Techniques of both traditional and contemporary tailoring using both hand and machine methods. Emphasizes proper fit and fine detail. Construction of a woman’s coat or jacket or a man’s sportcoat. Prerequisite: FASH 9 and 10 or evaluation by instructor. Hours: (72) 1 lect, 3 lab. CCS: Occupational Education. Transferable: CSU and Private Colleges.

FASH 13  TAILORING II (2 units)
Meets the needs of those who must construct clothing for those who are difficult to fit. Prerequisite: FASH 9 and 10 or evaluation by instructor. Hours: (72) 1 lect, 3 lab. CCS: Occupational Education. Transferable: CSU and Private Colleges.

FASH 23  APPAREL SELECTION (0.5 unit)
Using elements of art and principles of design, the selection of apparel is discussed as it relates to the individual. Factors also considered when personalizing the wardrobe: lifestyle, profession, financial status, and the statement you want to communicate. Prerequisite: Reading Level 1. Hours: (9) 3 lect for 3 weeks. CCS: Occupational Education. Transferable: CSU and Private Colleges.

FASH 24  TEXTILES AND FASHIONS (3 units)
Characteristics of fibers, yarns, fabric construction, dyes, and finishes. Emphasizes how these relate to wearability and design in today’s fashion world. Field trips may be required. Prerequisite: Reading Level 1. Hours: (54) 3 lect. Transferable: UC, CSU and Private Colleges.
FASH 51  BEGINNING SEWING (1.5 units)
Use and care of the sewing machine and fundamental clothing construction techniques. Prerequisite: None. Hours: (54) 1 lect, 2 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

FASH 52  INTERMEDIATE SEWING (1.5 units)
Advanced clothing construction techniques. Prerequisite: FASH 51 or high school clothing or evaluation by instructor. Hours: (54) 1 lect, 2 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

FASH 53  CUSTOM FITTING AND ALTERATIONS (2 units)
Basic principles of pattern alteration to achieve custom fitting of garments and of altering ready-to-wear garments. Prerequisite: FASH 51 or 52 or high school clothing or evaluation by the instructor. Hours: (72) 1 lect, 3 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

FASH 54  GARMENT DESIGN AND CONSTRUCTION I (2 units)
Designing a customized garment by modifying a basic pattern. Methods of individualizing clothing with structural and applied designs will be learned. Prerequisite: FASH 9 and 10 or evaluation by instructor. Hours: (72) 1 lect, 3 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

FASH 55  GARMENT DESIGN AND CONSTRUCTION II (2 units)
Design adjustments necessary for constructing garments from fabrics which require special handling techniques including synthetic suedes, furs, lycras, tricot and other specialized fabrics. Prerequisite: FASH 9 and 10 or evaluation by instructor. Hours: (72) 1 lect, 3 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

FASH 76h  OVERLOCK TECHNIQUES (1 unit)
Designed for students interested in updating on the industry's newest production equipment, fashion notions, and clothing construction techniques. Prerequisite: Evaluation by instructor. Hours: (27) 1 lect, 2 lab for 9 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.

FOOD SERVICE

FD SV 1  INTRODUCTION TO THE FOOD SERVICE INDUSTRY (1 unit)
Surveys the history, organization and functions of typical food service operations. Discusses job positions at all levels, including education and experience requirements, personal qualifications, job responsibilities, and career advancement. Provides an orientation to Bakersfield College curriculum and requirements. Satisfies the 0.5 unit counseling requirement for graduation from Bakersfield College. Prerequisites: Reading Level A and eligibility for associate degree English and math. Hours: (18) 1 lect. Field trips required. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.
FD SV 50a  COOPERATIVE WORK EXPERIENCE EDUCATION (1 unit)
An opportunity for students to combine a planned college food-service program with on-the-job experience, organized and coordinated by the college to provide an applied practical learning experience in the food service industry, commercial, institutional, and health care operations. **Prerequisites:** (a) Reading Level 1, (b) declared major in one of the following food service programs: Culinary Arts or Dietary Manager, (c) concurrent enrollment in seven or more units (including CWEE units) except summer school, (d) minimum 2.00 GPA, or evaluation by instructor. **Hours:** (75 per semester per credit unit at a paid job, or 60 per semester per credit unit at a non-paid job.) 5 per week. **Repeat:** Not to exceed a maximum of 12 units which are degree applicable. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FD SV 50b  COOPERATIVE WORK EXPERIENCE EDUCATION (2 units)
An opportunity for students to combine a planned college food-service program with on-the-job experience, organized and coordinated by the college to provide an applied practical learning experience in the food service industry, commercial, institutional, and health care operations. **Prerequisites:** (a) Reading Level 1, (b) declared major in one of the following food service programs: Food Service Management, Culinary Arts or Dietary Manager, (c) concurrent enrollment in seven or more units (including CWEE units) except summer school, (d) minimum 2.00 GPA, or evaluation by instructor. **Hours:** (150 per semester per credit unit at a paid job, or 120 per semester per credit unit at a non-paid job.) 10 per week. **Repeat:** Not to exceed a maximum 12 units which are degree applicable. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FD SV 50c  COOPERATIVE WORK EXPERIENCE EDUCATION (3 units)
An opportunity for students to combine a planned college food-service program with on-the-job experience, organized and coordinated by the college to provide an applied practical learning experience in the food service industry, commercial, institutional, and health care operations. **Prerequisites:** (a) Reading Level 1, (b) declared major in one of the following food service programs: Food Service Management, Culinary Arts or Dietary Manager, (c) concurrent enrollment in seven or more units (including CWEE units) except summer school, (d) minimum 2.00 GPA, or evaluation by instructor. **Hours:** (225 per semester per credit unit at a paid job, or 180 per semester per credit unit at a non-paid job.) 15 per week. **Repeat:** Not to exceed a maximum 12 units which are degree applicable. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FD SV 51a  FOOD SERVICE SKILLS DEVELOPMENT (1 unit)
An open entry/open exit course designed to develop performance skills and professional attitude. Introduces the student to the methods, techniques, terminology and equipment essential for job function in the food service industry. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
FD SV 51b  FOOD PREPARATION AND THEORY (3 units)
Basic principles and scientific concepts of food preparation for food service operations. Application of cookery principles to major food group classifications (i.e., stocks, sauces, soups, milk, cheese, eggs, meats, poultry, fish, fruits, vegetables, salads, breakfast items, and bakery items and desserts). Food presentation techniques. Application of basic culinary skills and procedures which can be adapted and applied to any cooking situation. **Prerequisites:** Reading Level 1 and completion of or concurrent enrollment in FD SV 51a. **Hours:** (90) 2 lect, 3 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FD SV 51c  RESTAURANT OPERATIONS (3 units)
Practical experience in preparation of basic restaurant menu items and in serving procedures. Students rotate through various work stations (i.e., range, pantry, backup, quantity food production, storeroom, cashier, host/hostess, and waiter/waitress). Emphasizes station organization, quality standards, portion control, sanitation/safety, customer satisfaction, and professional attitudes and behavior. **Prerequisites:** Reading Level 1 and completion of FD SV 51b. **Hours:** (126) 1 lect, 6 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FD SV 52  SANITATION AND SAFETY (2 units)
Basic principles of sanitation and safety standards set by regulatory agencies. Causes and prevention of food-borne illnesses. Proper sanitation practices and personal hygiene. Application of sanitary production, service and facilities maintenance techniques. Health regulations and inspections are emphasized. Exam given for the National Institute for the Foodservice Industry certificate. **Prerequisite:** Reading Level 1. **Hours:** (36) 2 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FD SV 53  GARDE MANGER/BUFFET (2 units)
Preparation of cold food items emphasizingaspic, chaud-froid sauce, hors d’oeuvres, foie gras, pates, terrines, mousse, cold sauces, edible food decorations, salads, cheeses, and ice carvings. Techniques for cold buffet presentation and food tray arrangements are integrated in the course. **Prerequisite:** Reading Level 1. **Hours:** (72) 1 lect, 3 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FD SV 54  CLASSICAL AND INTERNATIONAL CUISINE (3 units)
Preparation, presentation, and service of Classical international dishes. A la carte service, wine service and tableside preparation of various specialty food items are demonstrated and practiced. Emphasizes ethics of the profession: staffing; purchasing; menu planning and forecasting; food cost analysis; service techniques, and supervision. Buffet functions will be planned, prepared, and served. Students rotate through the various stations of the Renegade Room campus restaurant with special emphasis on the student chef of the day. **Prerequisites:** Reading Level 1 and completion of FD SV 51b. **Hours:** (126) 1 lect, 6 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
FD SV 55  ADVANCED BAKING (2 units)
Advanced baking experience in the production of European-style cakes, basic creams and icings, dessert sauces, doughnuts, crepes, tarts, puff pastry, eclairs, baked mer­ringues, petits fours, and specialty cookies. Decorating work and display pieces, pro­duce presentation and marketing techniques demonstrated. Prerequisites: Reading Level 1 and completion of FD SV 51b. Hours: (90) 1 lect, 3 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

FD SV 56  SPECIAL PROJECT IN FOOD SERVICE (1 unit)
Research and project development in special interest areas relating to the food service industry. Topics must extend study beyond the current curriculum and require depart­mental approval. A minimum of 18 hours for outside-of-class assignments is required. Prerequisites: Reading Level 1, completion of the first-year curriculum of the food service management program with a grade of “B,” and recommendation by faculty member. Hours: (18) 1 seminar. Repeat: 1, not to exceed 2 units. CCS: Occupational Education. Not Transferable: Associate Degree only.

FD SV 57  PURCHASING (3 units)
Food purchasing policies and procedures with respect to budget. Introduction to the market and buyer. Basic marketing functions and selection of food products for com­mercial and institutional food service operations. Emphasizes developing standard purchase specifications for various food service operations and on procedures for buy­ing, receiving, storing and issuing. Prerequisite: Reading Level 1. Hours: (54) 3 lect. Field trips required. CCS: Occupational Education. Not Transferable: Associate Degree only.

FD SV 58  SUPERVISORY TECHNIQUES (3 units)
Current methods of supervision and leadership which are applicable to the food ser­vice industry. Methods and techniques of training and supervising for overall efficiency of operation are stressed. Recruitment, selection, orientation, training and evaluation of personnel. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

FD SV 60  MENU PLANNING/MARKETING/COST CONTROL (3 units)
Basic principles of menu planning for food service operations and essentials of mer­chandising food. Budget development and cost-control procedures relating to inven­tories, labor, production and service, and sales income. Use of simple mathematics to solve problems of food management, forecasting, and preparation of financial statements. Emphasizes the application of marketing and advertising principles for food service operations. Prerequisites: Reading Level 1; eligibility for MATH 50 and completion of FD SV 57. Hours: (54) 3 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.
FD SV 64a HEALTH CARE FOOD SERVICE OPERATIONS I (3 units)
Role and responsibilities of the dietary manager and/or dietetic service supervisor in managing health care and community food service operations. Application of standards, principles, and techniques of normal nutrition, therapeutic nutrition, food production and service. Management of supplies, equipment use, sanitation and safety. Provides 90 hours directed work experience in approved health care facilities. **Prerequisites:** Reading Level 1 and completion of or concurrent enrollment in NUTR 10, FD SV 51b and 52. **Hours:** (126) 2 lect, 5 directed work experience. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FD SV 64b HEALTH CARE FOOD SERVICE OPERATIONS II (3 units)
Role and responsibilities of the dietary manager, and/or dietetic service supervisor in health care and community food service operations. Application of standards, principles and techniques of nutritional assessment; diet modification; patient nutrition education; leadership and human relations; patient and inter-departmental communications; personnel selection and supervision; fiscal management and evaluation of dietary services. Provides 90 hours directed work experience in approved health care facilities. **Prerequisites:** Reading Level 1 and completion of or concurrent enrollment in NUTR 10, FD SV 51b and FD SV 52. **Hours:** (126) 2 lect, 5 directed work experience. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FD SV 65 BASIC SKILLS: BASIC FOODS (2 units)
Overview of basic preparation skills involved in preparing and serving nutritious acceptable foods in schools, child care centers, and family day care programs. Subject areas include food preparation principles, standardized recipes, components of the reimbursable meal pattern, United States Dietary Guidelines and the Basic Four Food Groups, safety and sanitation standards and procedures, portion control, basics of work improvement, recordkeeping, and methods of developing communication skills. **Prerequisite:** Reading Level 1. **Hours:** (54) 1½ lect. 1½ lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FD SV 66 MENU DESIGN FOR CHILD NUTRITION PROGRAMS (3 units)
Overview of menu planning for child nutrition programs including reimbursable meal patterns, student preferences, basic nutrition and menu planning principles, menu development techniques, and menu management procedures. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**INTERIOR DESIGN**

INT D 1 INTRODUCTION TO INTERIOR AND ENVIRONMENTAL DESIGN (1 unit)
Overview of the field of Interior Design and how it relates to architecture and environmental design, employment opportunities, and educational programs. **Prerequisite:** Reading Level 1. **Hours:** (18) 1 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.
INT D 12  CAREERS: PROFESSIONAL PRACTICES (2 units)
Interior design, decoration and related occupations. Includes business methods and techniques, professional skills required for employment, professional ethics and other practices necessary for success. **Prerequisite:** INT D 1, 15a, 21a and 15b (may be taken concurrently). **Hours:** (36) 3 lect for 12 weeks. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

INT D 14  ART TECHNIQUES FOR PRESENTATION (1 unit)
Basic concepts and techniques for interior design presentations. Application of art principles in visual communication, including the survey and exploration of various media and the organization of portfolios, graphs, charts, posters and display boards. **Prerequisite:** Reading Level 1. INT D 15a; ART 2a (may be taken concurrently). **Hours:** (18) 2 lect for 9 weeks. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

INT D 15a  ELEMENTS AND PRINCIPLES OF INTERIOR DESIGN (3 units)
Identification and application of the elements and principles of design. Emphasis on organized selection and arrangements for beauty, comfort and care as adapted to user needs. **Prerequisite:** Concurrent enrollment in INT D 14. ART 3a recommended. Reading Level 1. **Hours:** (54) 3 lect. Field trips required. **CCS:** Occupational Education. **Transferable:** UC, CSU and Private Colleges. Credit limitations. For specific information see counselor.

INT D 15b  MATERIALS AND COMPONENTS OF INTERIOR DESIGN (3 units)
Creating interiors related to site, architecture, floor plans, color and furnishings. Comparison of materials, construction, calculations, and processes for selection and installation. Individual and group projects. **Prerequisite:** INT D 15a. **Hours:** (54) 3 lect. Field trips required. **CCS:** Occupational Education. **Transferable:** UC, CSU and Private Colleges. Credit limitations. For specific information see counselor.

INT D 16  MEASUREMENTS AND CALCULATIONS (2 units)
Installation methods and problems. Accurate measurement and calculation of materials and costs involved in design treatments for walls, windows, floors, furniture, bedding, and other soft goods. **Prerequisite:** Reading Level 1, MATH 60 or high school algebra. **Hours:** (36) 3 lect for 12 weeks. Field trips may be required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

INT D 21a  INTERIOR DRAWING (1.5 units)
Drafting of floor design, interior elevations, and sections for working with craftsmen including presentation to the client. **Prerequisite:** Reading Level 1. INT D 1 or ARCH 1. **Hours:** (54) 1 lect, 2 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.
INT D 21b  INTERIOR DRAWING (1.5 units)
Basic drawing and rendering techniques for presenting interiors to design clientele. **Prerequisite:** INT D 21a. **Hours:** (54) 1 lect, 2 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

INT D 22  HOUSING AND ENVIRONMENTAL DESIGN (3 units)
Environmental and socio-economic approach to total home design. Physical site, landscape, architecture, houseplans, space planning, construction and costs. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

INT D 23a  FURNITURE STYLES (2 units)
Styles of architecture and furnishings from antiquity through modernity. Middle Ages, Italian Renaissance, Hispanic, French and English periods emphasized. Development of design and adaptation to contemporary use. **Prerequisite:** INT D 15 a or ART 30a, b, or c (may be taken concurrently). **Hours:** (36) 2 lect. Field trips may be required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

INT D 23b  FURNITURE STYLES (2 units)
Furniture decor and architectural style in Early American, Victorian, Oriental, Modern, and Contemporary design. **Prerequisite:** INT D 23a. **Hours:** (36) 2 lect. Field trips may be required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

INT D 24  TEXTILES (3 units)
Characteristics of fibers, yarns, fabric construction, dyes, and finishes. Emphasis on design, serviceability, and care related to interior design needs. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

INT D 75  TOPICS IN INTERIOR DESIGN (0.5 – 2 units. Limit 8 units)
**Prerequisite:** None. **Hours:** (9-36) Minimum of 9 hours per half unit of credit. **Repeat:** Maximum of 8 units. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

INT D 75a  USE OF ACCESSORIES
INT D 75b  LIGHTING (0.5 – 1.0 unit)
INT D 75c  COMMERCIAL SPECIFICATIONS
INT D 75f  WALLPAPERING TECHNIQUES
INT D 75g  RETAILING AND MERCHANDISING IN INTERIOR DESIGN
INT D 249  COOPERATIVE WORK
EXPERIENCE EDUCATION (1 – 4 units)
College credit for learning experiences obtained on the job in accordance with a training
plan developed cooperatively between the employer, college, and student. Prerequisites: (a) Declared vocational major, (b) concurrent enrollment in seven or more units (includ­ing CWEE units, except summer school), (c) minimum 2.00 GPA, or evaluation by instruc­tor. Hours: (75 per semester per credit unit at a paid job, or 60 per semester per credit unit at a non-paid job.) 5 or more per week. Repeat: Not to exceed 16 units. CCS: Occupational Education. Transferable: CSU and Private Colleges. Credit limitations. For specific information see counselor. Note: Formerly W EXP 49.

NUTRITION

NUTR 10  ELEMENTARY NUTRITION (3 units)
General breadth requirements for a liberal arts program should be followed.

**GERMAN**

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1ab Elementary German</td>
<td>5.0</td>
<td>4 Intermed German</td>
<td>4.0</td>
</tr>
<tr>
<td>2ab Elementary German</td>
<td>5.0</td>
<td>5ab Oral German</td>
<td>6.0</td>
</tr>
<tr>
<td>3 Intermed German</td>
<td>4.0</td>
<td>Other Modern Foreign Language</td>
<td></td>
</tr>
</tbody>
</table>

**Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>4ab European Civilizatn</td>
<td>6.0</td>
</tr>
<tr>
<td>Music Appreciation</td>
<td>3.0</td>
</tr>
<tr>
<td>Comparative Govt</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SPANISH**

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1ab Elementary Spanish</td>
<td>5.0</td>
<td>4 Intermed Spanish</td>
<td>4.0</td>
</tr>
<tr>
<td>2ab Elementary Spanish</td>
<td>5.0</td>
<td>5ab Advanced Spanish</td>
<td>6.0</td>
</tr>
<tr>
<td>3 Intermed Spanish</td>
<td>4.0</td>
<td>Other Modern Foreign Language</td>
<td></td>
</tr>
</tbody>
</table>

**Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>4ab European Civilizatn</td>
<td>6.0</td>
</tr>
<tr>
<td>30a Early Chicano Hist</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL 31a Latn Am/Mexican Lit</td>
<td>3.0</td>
</tr>
<tr>
<td>Comparative Govt</td>
<td>3.0</td>
</tr>
</tbody>
</table>
COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: lect lecture; lab laboratory; demo demonstration; Repeat repeatability; CCS Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. NOTE: If repeatability is not shown, course may not be repeated.

FILIPINO

FILIP 52a—52b ELEMENTARY CONVERSATIONAL FILIPINO (2—2 units)
Designed for those who wish to develop a basic understanding of conversational Filipino. Emphasizes pronunciation, correct usage and common idiomatic speech. Prerequisite: 52a: None; 52b: FILIP 52a. Hours: (54-54) 3 hours. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.

FILIP 52c—52d INTERMEDIATE CONVERSATIONAL FILIPINO (2—2 units)
Designed for those who wish to develop a basic understanding of conversational Filipino. Emphasizes pronunciation, correct usage and common idiomatic speech. Prerequisite: 52c: FILIP 52b or evaluation by instructor; 52d: 52c or evaluation by instructor. Hours: (54-54) 3 hours. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.

FRENCH

FREN 1ab ELEMENTARY FRENCH (5 units)
1a—1b (2.5—2.5) equivalent to 1ab.
An introduction to French language and culture. Development of basic language skills: listening, speaking, reading and writing, with emphasis upon oral communication. Frequent drills in pronunciation, comprehension and structure. Aspects of French life and culture are integrated with language learning. Requires practice in the language laboratory outside of regular class time. Prerequisite: Reading Level 1. Hours: (90) 5 hours. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

FREN 2ab ELEMENTARY FRENCH (5 units)
2a—2b (2.5—2.5) equivalent to 2ab.
A continuation and consolidation of the fundamental skills and content of French 1ab. Prerequisite: FREN 1ab or two years of high school French. Hours: (90) 5 hours. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

FREN 3 INTERMEDIATE FRENCH (4 units)
A review of basic structures learned in the first year course with new elements added. Continued emphasis of all four language skills—listening, speaking, reading and writing. Reading selections present modern French writers and aspects of French civilization and culture. Requires practice in language laboratory. Prerequisite: FREN 2ab or three years of high school French. Reading Level 1. Hours: (72) 4 hours. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.
FREN 4  INTERMEDIATE FRENCH (4 units)
A continuation of the studies begun in FREN 3. Grammar review and presentation of some of the more complex structures. Special emphasis is given to oral and written communication and to selected excerpts from the works of modern French writers. Requires time outside of class listening to taped programs. **Prerequisite:** FREN 3 or 4 years of high school French. **Hours:** (72) 4 hours. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

FREN 52a-52b  ELEMENTARY CONVERSATIONAL FRENCH (2—2 units)
Designed for those who wish to develop a basic understanding of conversational French. Emphasizes pronunciation, correct usage and common idiomatic speech. **Prerequisite:** 52a: None; 52b: FREN 52a or equivalent. **Hours:** (54-54) 3 hours. **Repeat:** 1. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

GERMAN

GERM 1ab  ELEMENTARY GERMAN (5 units)
1a—1b (2.5—2.5) equivalent to 1ab.
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. **Prerequisite:** Reading Level 1. **Hours:** (90) 5 hours. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

GERM 2ab  ELEMENTARY GERMAN (5 units)
2a—2b (2.5—2.5) equivalent to 2ab.
Continuation of GERM 1ab with additional emphasis on conversational style. Practice in the language laboratory. **Prerequisite:** GERM 1ab, or two years of high school German. **Hours:** (90) 5 hours. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

GERM 3  INTERMEDIATE GERMAN (4 units)
Selected readings in German with study of German cultural background. Review of essentials of grammar with more advanced structure and vocabulary. Use of audio-visual materials for improvement of comprehension. Practice in the language laboratory. **Prerequisite:** GERM 2ab or three years of high school German. Reading Level 1. **Hours:** (72) 4 hours. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

GERM 4  INTERMEDIATE GERMAN (4 units)
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. **Prerequisite:** GERM 3 or four years of high school German. **Hours:** (72) 4 hours. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.
GERM 5a – 5b  ORAL GERMAN (3 – 3 units)
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. **Prerequisite:** GERM 3 or equivalent. May be taken concurrently with GERM 4. 5a is not a prerequisite to 5b. **Hours:** (54-54) 3 hours. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

GERM 52a – 52b  ELEMENTARY CONVERSATIONAL GERMAN (2 – 2 units)
Designed for those who wish to develop a basic understanding of conversational German. Emphasizes pronunciation, correct usage and common idiomatic speech. **Prerequisite:** 52a: None; 52b: GERM 52a or equivalent. **Hours:** (54-54) 3 hours. **Repeat:** 1. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

GERM 52c  INTERMEDIATE CONVERSATIONAL GERMAN (2 units)
Designed to present continuity in studying conversational German. More extensive practice in conversation through the use of filmstrips and recordings which reveal present-day German culture and customs. Designed for those who wish to improve their present speaking knowledge of German. **Prerequisite:** GERM 52b or GERM 1ab or at least two years of recent high school German. **Hours:** (54) 3 hours. **Repeat:** 1. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

LATIN

LATIN 1  ELEMENTARY LATIN (3 units)
An introduction to basic vocabulary and grammatical forms for reading simple Latin phrases. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 hours. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. **Note:** Offered only occasionally.

LATIN 2  ELEMENTARY LATIN (3 units)
A continuation of course 1; emphasizes reading and interpreting works of noted Roman authors. **Prerequisite:** LATIN 1 or two years of high school Latin. **Hours:** (54) 3 hours. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. **Note:** Offered only occasionally.

SPANISH

SPAN 1ab  ELEMENTARY SPANISH (5 units)
1a – 1b (2.5 – 2.5) equivalent to 1ab. Emphasizes comprehension and correct oral delivery of basic language patterns. Simple exercises in reading and writing as well as constant oral drill in class and language laboratory afford the opportunity to acquire an active use of the language on an elementary level. **Prerequisite:** Reading Level 1. **Hours:** (90) 5 hours. **Repeat:** 1. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.
SPAN 2ab  ELEMENTARY SPANISH (5 units)
2a—2b (2.5—2.5) equivalent to 2ab.
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. Prerequisite:
SPAN 1ab, or two years of high school Spanish. Hours: (90) 5 hours. CCS: Liberal
Arts and Sciences. Transferable: UC, CSU and Private Colleges.

SPAN 3  INTERMEDIATE SPANISH (4 units)
Readings in Spanish and Latin-American literature aimed toward developing com­
petence 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. Prerequisite: SPAN 2ab or three
years of high school Spanish. Hours: (72) 4 hours. CCS: Liberal Arts and Sciences.
Transferable: UC, CSU and Private Colleges.

SPAN 4  INTERMEDIATE SPANISH (4 units)
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. Prerequisite: SPAN
3 or four years of high school Spanish. Hours: (72) 4 hours. CCS: Liberal Arts and
Sciences. Transferable: UC, CSU and Private Colleges.

SPAN 5a — 5b  ADVANCED SPANISH (3—3 units)
Extensive readings in Spanish and Latin-American literature and further development
of conversational ability. Written and oral reports. Prerequisite: Four years of high
school Spanish, or SPAN 3 with a grade of “B” or SPAN 4. May be taken concur­
tently with SPAN 4. Hours: (54-54) 3 hours. CCS: Liberal Arts and Sciences.
Transferable: UC, CSU and Private Colleges.

SPAN 52a — 52b  ELEMENTARY
CONVERSATIONAL SPANISH (2—2 units)
Designed for those who wish to develop a basic understanding of conversational Spanish.
Emphasizes pronunciation, correct usage and common idiomatic speech. Prerequisite:
52a: None; 52b: SPAN 52a or equivalent. Hours: (54-54) 3 hours. Repeat: 1. CCS:
Liberal Arts and Sciences. Not Transferable: Associate Degree only.

SPAN 52c — 52d  INTERMEDIATE
CONVERSATIONAL SPANISH (2—2 units)
Designed to present continuity in the study of conversational Spanish. Advanced
practice in conversation, usage and grammar. Prerequisite: 52c: SPAN 52b or
evaluation by instructor; 52d: SPAN 52c or evaluation by instructor. Hours: (54-54)
3 hours. Repeat: 1. CCS: Liberal Arts and Sciences. Not Transferable: Associate
Degree only.
SPAN 52e – 52f ADVANCED CONVERSATIONAL SPANISH (2 – 2 units)
For students who have achieved the "survival level" in everyday spoken Spanish and who want to continue to improve their skills in conversation, expand their working vocabulary, and perfect their comprehension of the language as used by native speakers. Prerequisite: SPAN 52d or equivalent, or evaluation by instructor. Hours: (54-54) 3 hours. Repeat: 1. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.

SPAN 54 SPANISH FOR HEALTH CAREERS (2 units)
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. Prerequisite: None. Hours: (54) 3 hours. Repeat: 1. CCS: Occupational Education. Not Transferable: Associate Degree only.

SPAN 55 SPANISH FOR LAW ENFORCEMENT PERSONNEL (2 units)
 Presents speaking, listening, reading and writing skills in Spanish. Communication in various situations which law enforcement personnel encounters in the course of their work will be offered. Emphasis will be on oral drill and practice in simulated situations. Prerequisite: None. Hours: (54) 3 hours. Repeat: 1. CCS: Occupational Education. Not Transferable: Associate Degree only.

SPAN 57a SPANISH FOR SECRETARIES AND RECEPTIONISTS (3 units)
The student will develop basic conversational skills necessary for general receptionist work and writing skills useful for writing letters and memos. Prerequisite: None. Hours: (54) 3 hours. Repeat: 1. CCS: Occupational Education. Not Transferable: Associate Degree only.

SPAN 59a – 59b PRACTICAL SPANISH FOR AGRICULTURE (2 – 2 units)
Introduces students to the vocabulary and idiom in current use among Spanish speakers of the San Joaquin Valley agricultural region. While grammatical concepts are presented, the primary goal is development of listening and speaking skills, along with acquisition of appropriate cultural concepts. Prerequisites: 59a — none. 59b — SPAN 59a. One year of high school Spanish recommended. Hours: (54 – 54) 3 lect. Repeat: 1. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Not open to students with credit in AGRIC 59a and 59b.

SPAN 70 TOPICS IN SPANISH (1 – 2 units. Limit 8 units.)
Concentrates on current events derived from current sources written in Latin America and Spain. May be taken four times only. 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. Hours: (18) 18 lect/discussion per unit. Repeat: 3, or until a limit of 8 units is reached. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.
The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability; **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. **NOTE:** If repeatability is not shown, course may not be repeated.

**GN ST 1 THE CONTEMPORARY WOMAN (3 units)**
An exploration of the major historical, social, psychological and health issues facing women today. Primary focus is on the historical and contemporary patterns of women's lives in American society. Guest speakers from the community will be utilized. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

**GN ST 5sdw SELF DEFENSE FOR WOMEN (0.5 – 1 unit)**
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. **Prerequisite:** Reading Level 1. **Hours:** (18-36) 18 hours per 0.5 unit. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

**GN ST 10 INDEPENDENT READING PROGRAM (1 – 2 units)**
A program designed for the student interested in independent reading of books in the social sciences, physical sciences and humanities under library staff supervision. **Prerequisite:** None. **Hours:** (36) One 2-hour meeting and coordinated instruction system. Time by arrangement. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

**GN ST 11 TOOLS FOR COLLEGE SURVIVAL (2 units)**
Increases students' probability of success in college by helping students obtain skills necessary to reach their educational objective. Provides the opportunity for students to learn and adopt skills proven to promote success in college, including study skills and personal life skills. Also includes graduation requirements as well as admission and transfer requirements. Satisfies the 0.5 unit counseling requirement for graduation from Bakersfield College. **Prerequisite:** Reading Level 1. **Hours:** (40½) 3 lect for 13½ weeks. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges. **Note:** Not open to students with credit in COUNS 11.

**GN ST 13 OPTIONS: THE CAREER SEARCH (1 unit)**
OPTIONS, Opportunity Program Training Individuals for Occupational and Non-traditional career Success offers an introduction to career search strategies. Students will
be given a variety of skills, interests, personality and vocational tests. Individual needs and values will be discussed. Students will learn techniques for goal setting, decision making, and researching the job market. Development of resume writing and interviewing skills will be emphasized. **Prerequisite:** Reading Level 1. **Hours:** (18) 3 lect for 6 weeks. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

**GN ST 13a OPTIONS: DISCOVERING YOURSELF AND YOUR CAREER (3 units)**
Opportunity Program Training Individuals for Occupational and Non-traditional career Success offers an introduction to the world of work and higher education. Through vocational and personality testing, values clarification and goal-setting strategies, the student is guided through the process of career decision making. Emphasizes the ongoing process of life planning as a prerequisite to career success. Includes an introduction to the college and educational planning. Satisfies the 0.5 unit counseling requirement for graduation from Bakersfield College. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect/discussion. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges. **Note:** Not open to students with credit in COUNS 13a.

**GN ST 13b OPTIONS: ORIENTATION TO COLLEGE AND CAREERS (5 units)**
Opportunity Program Training Individuals for Occupational and Non-traditional career Success. The program is designed to assist the returning or new student to become academically successful while developing an appropriate career plan. Offers a combination of learning skills techniques and career exploration activities. Topics include time planning, study techniques, communication skills, personal issues faced by many new and returning students, self-assessment, job search, resume writing, interviewing and the world of work. Satisfies the 0.5 unit counseling requirement for graduation from Bakersfield College. **Prerequisite:** Reading Level 1. **Hours:** (90) 5 lect/discussion. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges. **Note:** Not open to students with credit in COUNS 13b.

**GN ST 15 CAREER SHADOWING (0.5 unit)**
Students will explore a specific job for two full working days through the cooperation of local employers and employees; meet with the volunteer employee and actually "shadow" the employee through his/her usual daily duties; and meet with the instructor before and after the shadowing experience to plan, evaluate and continue the career choice process. **Prerequisite:** GN ST 13/COUNS 13; or GN ST 13a/COUNS 13a; or GN ST 13b/COUNS 13b. **Hours:** (18) 13 practicum experience. Repeat: 1. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

**GN ST 24 LATINAS IN THE UNITED STATES (2 units)**
A survey of the changing psychological and social conditions of Latinas as they pertain to the economic, political, and family developments within the Hispanic cultural context. An analysis of specific issues such as housing, health, and employment will be made in their specific relationships with Latinas in relation to the broad areas of the economy, the family and politics. **Prerequisite:** Reading Level 1. **Hours:** (36) 2 lect/discussion. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. **Note:** Not open to students with credit in CH ST 24.
GN ST 28  WOMEN IN THE WORLD (3 units)
Study of woman's role in the different parts of the world. Examines past activities and contributions of women in different societies. Attempts to gain understanding of changes and impact upon women's roles due to their cultural backgrounds. Societies include Israel, India, the United States, Europe, Africa and Latin America. Prerequisites: Reading Level 1 and ENGL Level 3. Hours: (54) 3 lect/disc. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. Note: Not open to students with credit in SOC 28. Formerly WN ST 28.

GN ST 30  TRANSACTIONAL SKILLS (3 units)
An examination of behavior through the concepts of Transactional Analysis and the Karpman Drama Triangle. The aim is to afford the individual student an awareness of behaviors which are productive, non-productive or destructive, and to enhance awareness of student's own communication choices. Prerequisite: Reading Level 1. Hours: (54) 3 lect. Repeat: 1. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

GN ST 35  RELATIONSHIPS IN THE 1980's (3 units)
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. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

GN ST 37  PSYCHOLOGY OF WOMEN (3 units)
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. Prerequisite: Reading Level 1. PSYCH 51 or 1a recommended. Hours: (54) 3 lect/discussion. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

GN ST 49  PEER ADVISING (2 units)
Designed to meet the needs of peer advisers for ongoing training and supervision. Focuses on the role of the peer adviser as a campus representative and paraprofessional. Emphasizes the development of interpersonal skills; the nature of the helping relationship; knowledge of community and campus resources; and the processing of making referrals. Prerequisites: Reading Level 1 and evaluation by instructor. Hours: (80) 1 lect, 3 lab, 8 by arrangement. Repeat: 3. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.
GN ST 50  CHOICES AND CHALLENGES (3 units)
Personal planning and self-awareness for young women and men. The aim is to help students set life-long job related and personal goals and develop the specific and essential skills needed to make the choices and to meet the challenges to attain these goals for the rest of their lives. The purpose is to help each student to begin to face reality, learn to accept responsibility, think about their future, learn to set reasonable goals and learn sound decision-making techniques for developing logical plans to achieve those goals. Satisfies 0.5 unit counseling requirement for graduation from Bakersfield College. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only. Note: Not open to students with credit in COUNS 50 taken prior to Spring, 1988.

GN ST 52  BASIC TOOLS FOR COLLEGE SUCCESS (3 units)
Increases the level-2 readers’ probability of success in college by helping students obtain skills necessary to reach their educational objective. Provides the opportunity for students to learn and adopt skills proven to promote success in college, including study skills and personal life skills. Includes graduation requirements as well as admission and transfer requirements. Satisfies the 0.5 unit counseling requirement for graduation from Bakersfield College. Prerequisite: Reading Level 2. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only. Note: Not open to students with credit in COUNS 52.

GN ST 55  WOMEN IN BUSINESS (3 units)
Examines the roles of women in business from both historical and contemporary perspectives. The needs of women in business at all levels of career development—from prospective employee to top-level management—will be addressed. Topics include career decision making and management; the effects of sex-role stereotyping; networking and mentoring; conflict management; and effective communication in business settings. Prerequisite: None. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.

GN ST 74a  EFFECTIVE INTERPERSONAL COMMUNICATION (1 unit)
Provides the skills to communicate clearly and directly. Students will learn to express themselves in interpersonal relations, to identify and clearly communicate their individual needs, and to act on, rather than react to others. Prerequisite: None. Hours: (18) 2 lect for 9 weeks. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.

GN ST 74b  UNDERSTANDING SELF THROUGH WRITING (1 unit)
Provides direction and practice in journal writing. Readings, discussions and structured exercises will be used to facilitate student self-exploration and expression. Students will keep a daily journal during the course of the class. Prerequisite: None. Hours: (18) 2 lect for 9 weeks. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.
GN ST 74c  PARENTING SKILLS (0.5 unit)
Designed as a discussion group to examine and explore issues of parenting. Topics include ages and stages of child development, communication skills, working together as a family team, time management, techniques in parenting skills. **Prerequisite:** None. **Hours:** (9) 1 lect for 9 weeks. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

GN ST 74d  WOMEN AND FOOD (1 unit)
The special relationship between women and food will be explored, drawing on the anthropological, medical and psychological literature. Topics include the nutritional needs of women across the lifespan; the food-related roles of women cross-culturally; the emotional and symbolic uses of food in women’s lives and the contemporary phenomenon of eating disorders. **Prerequisite:** None. **Hours:** (18) 2 lect for 9 weeks. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

GN ST 74e  FAMILIES AND HOW TO SURVIVE THEM (1 unit)
Students will explore the dynamics of their family of origin and how these dynamics influence their current relationships. Topics include selection of mates; the family as a system; the influence of birth order; the impact of children on the marital relationship; special family problems like addiction and abuse; parenting and communication skills. **Prerequisite:** None. **Hours:** (18) 2 lect for 9 weeks. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

GN ST 74f  MEN, WOMEN AND MYTHS: THE GRIMM TRUTH (1 unit)
An examination of well-known fairy tales and how these stories have formed men’s and women’s perceptions of themselves. Emphasizes the myths portrayed in the tales and a process of examination through which students can evaluate attitudes towards relationships. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (18) 2 lect for 9 weeks. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Not degree applicable.

GN ST 74g  THE FAMILY IN A CHANGING WORLD: A PERSPECTIVE THROUGH FILM (0.5 unit)
Films present images which often mirror our experiences. Three selected films will be used as vehicles for presenting basic concepts of family systems theory. Students will explore issues relevant to the family under stress and relate these issues to their own experiences. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (9) 3 lect for 3 Saturdays. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Not degree applicable.

GN ST 74h  FATHER/CHILD RELATIONSHIPS (0.5 unit)
Designed for the father wishing to improve his parenting skills. Students will learn basic techniques of communication and parenting that help build a close and expressive relationship. Specific suggestions will be made for activities that enhance self-esteem and pleasure of both the father and child. Emphasizes parenting skills for the single or “weekend” father. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (9) 3 lect Friday evening, 6 lect Saturday. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Not degree applicable. **Note:** Not open to students with credit in FAM S 74h.
GN ST 74i MEN IN A CHANGING WORLD (1 unit)
Examines the major social and psychological issues facing the American male today. Readings, discussion and films will be used in this short-term course to explore cultural and personal perceptions of what it means to be a man in the late twentieth century. **Prerequisite:** Reading Level 1 or evaluation by instructor. ** Hours:** (18) 2 lect for 9 weeks. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Not degree applicable.

GN ST 74j WOMEN IN A CHANGING WORLD (1 unit)
Examines the major social and psychological issues facing the American female today. Readings, discussion and films will be used in this short-term course to explore cultural and personal perceptions of what it means to be a woman in the late twentieth century. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (18) 2 lect for 9 weeks. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Not degree applicable.

GN ST 74k CAREERS: CHALLENGE AND CHANGE (0.5 unit)
Issues and problems facing the working person and/or student as they relate to a variety of situations including combining work, school and family demands, are examined in this short-term course. Readings, discussion and films will be used to explore a variety of career challenges, i.e. time management, stress reduction, etc. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (9) 1 lect for 9 weeks. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Not degree applicable.

GN ST 74L MEN/WOMEN AND THE LAW (0.5 unit)
Examines the major legal issues and changes facing the American male/female today. Includes family law, sexual harassment, spousal abuse, etc. Speakers from the community will be utilized in this short-term course. Readings, discussion and films will be used to explore issues and methods of legal resolution, i.e. family violence, sexual discrimination, etc. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (9) 1 lect for 9 weeks. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Not degree applicable.

GN ST 74m A POSITIVE ATTITUDE TOWARD MATH (0.5 unit)
Designed for students who have an inhibiting fear which precludes their success in the study of mathematics, this course explores attitudes towards mathematics through journal writing and class discussion; teaches problem-solving approaches using both the right and the left brain, and assists students in reducing their level of math anxiety. **Prerequisites:** Reading Level 1; qualification for MATH A (Elem Algebra) or higher; or evaluation by instructor. **Hours:** (9) 1 lect for 9 weeks. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Not degree applicable.
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 a level of emotional and physical health necessary to meet program requirements.

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 10-month 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 judgment.

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 Written and Practical Examination for Licensure.

Students are selected for the Dental Assisting Program once a year. Classes begin each Summer (August 1st). Applications are accepted from November 1 through May 31 each year.

Prerequisites for the program:
1. Graduation from high school, or equivalent education.
2. English 1 eligibility as demonstrated by the B.C. assessment tests.
3. Typing or word processing skills
4. MATH 50 or equivalent.
5. Proof of adequate health status is required for final acceptance.
6. Applicants must have current (within 2 years of application) BC placement scores.
7. Reading Level 1.
### CERTIFICATE OF ACHIEVEMENT PROGRAM

**SUMMER (2 Weeks)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNT A 50</td>
<td>Intro Dental Assisting</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNT A 51</td>
<td>DNT A 53</td>
</tr>
<tr>
<td>Mtrl/Proced/Instrum</td>
<td>Bio Dental Sciences</td>
</tr>
<tr>
<td>DNT A 52</td>
<td>DNT A 55</td>
</tr>
<tr>
<td>Dent Anat Terminology</td>
<td>Dent Office Proced</td>
</tr>
<tr>
<td>DNT A 54</td>
<td>DNT A 58b</td>
</tr>
<tr>
<td>Commnc/Psyh Dnt A1.0</td>
<td>Operatory Technique</td>
</tr>
<tr>
<td>DNT A 58a</td>
<td>DNT A 59</td>
</tr>
<tr>
<td>Operatory Technique</td>
<td>Intra Oral Procedure</td>
</tr>
<tr>
<td>DNT A 60a</td>
<td>DNT A 60b</td>
</tr>
<tr>
<td>Dental Radiography</td>
<td>Dental Radiography</td>
</tr>
<tr>
<td>DNT A 65a</td>
<td>DNT A 65b</td>
</tr>
<tr>
<td>Int Chairside Assstg</td>
<td>Adv Chair/Offc Asst</td>
</tr>
<tr>
<td>TOTAL</td>
<td>TOTAL</td>
</tr>
<tr>
<td>16.0</td>
<td>17.0-19.0</td>
</tr>
</tbody>
</table>

**NOTE:** To receive a certificate of completion the student must pass all courses with a minimum grade of "C." A student may repeat a fall course the next fall or a spring course the next spring if the appropriate grade was not achieved at the first attempt.

In addition to those courses included in the above outlined Certificate of Achievement Program, the students who wish to complete the Associate in Science Degree must comply with all applicable general education requirements shown in the catalog under Graduation Requirements for Bakersfield College.

The general education requirements may be taken prior to, or upon completion of, the above outlined Dental Assisting courses.

### ADDITIONAL INFORMATION

A physical exam 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. This will be done at the student's expense.

### EXPENSES

Students will be required to purchase uniforms, textbooks, selected equipment, provide transportation to off-campus sites for clinical experience, and pay current college fees.

Students must pay their own testing fees for the California Registered Dental Assistant written and practical exams, and the National Certification Exam to become a Certified Dental Assistant.
EMERGENCY MEDICAL TECHNOLOGY PROGRAMS

EMERGENCY MEDICAL TECHNICIAN 1

This is a 120-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 50 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 (see EMT 1r course description).

PRIMARY CARE ASSOCIATE
(Physician's Assistant)

Stanford University Medical Center administers a program to train individuals who function in association with physicians in the maintenance and delivery of primary health care to medically underserved communities.

Upon completion of the prerequisite pre-clinical program at Bakersfield College or other accredited institutions, students admitted to the program have 15 months of clinical experience coordinated through Stanford University Medical Center. Students participate in didactic course work full-time for the first quarter (3 months) at Stanford Medical Center in Palo Alto, California. Then they complete an equivalent of five days didactic instruction each month (12 months) thereafter. All clinical experience occurs in an office practice preceptorship.

NOTE: CONTACT COUNSELING DEPARTMENT FOR FURTHER INFORMATION.

Prerequisites:

Minimum requirements for application and admission include:

1. United States Citizen or permanent Visa.
2. High School Diploma or equivalent.
3. A minimum of 12 months direct patient care experience.
4. Satisfactory completion of the following academic prerequisites or their equivalents.

The student must have a preceptor site established in order to complete the clinical experiences necessary for the program.

Upon successful completion of the P.C.A. program, the graduate will sit for a certifying examination, administered by the National Commission on Certification of Physician's Assistants. Passing this examination allows the Physician's Assistant to perform direct patient services under the supervision of primary care physicians certified by the California Board of Medical Quality Assurance.
Pre-Clinical Program Requirements

A grade of “C” or better must be attained in each of these courses. Only work from a regionally accredited college can be accepted.

Algebra — Elementary. One year of high school math or MATH A/200a at Bakersfield College.

Anatomy 1 and Physiology 1 at Bakersfield College or equivalent. Must be at least 10-12 quarter units or 7-8 semester units.

Chemistry — Introductory. One year of high school chemistry, or CHEM 11 at Bakersfield College or equivalent.

Cultural Anthropology or Sociology: ANTH 2, SOC 1 at Bakersfield College, or other acceptable course.

English Composition — Freshman level: ENGL 1, ENGL 1a at Bakersfield College, or other acceptable course.

General Psychology — PSYCH 1a at Bakersfield College, or other acceptable course.

Microbiology with laboratory: BACT 2 at Bakersfield College, or other acceptable course.

• American History and Institutions. HIST 17a and HIST 17b at Bakersfield College.

• Computer Literacy — Two semester units. Must include experience at a terminal (DTA P 1 or COM S 5 at Bakersfield College, or other acceptable course).

• Ethnic Studies — A course that reflects the experience of an American Ethnic group.

• Humanities — One course from List A and one course from List B. (A) Literature, Philosophy (not Logic), or Western Civilization. (B) Art Appreciation, Music Appreciation, or Theatre Arts Appreciation.

• Physical Education — Four quarter courses or three semester courses.

• Speech — Public Speaking or interpersonal communication: SPCH 1 or SPCH 2 at Bakersfield College, or other acceptable course.

*These course areas are required if candidate does not possess an A.A., A.S. or higher academic degree.
RADIOLeGIC TECHNOLOGY

Radiologic Technology is a health care profession whose practitioners work in hospitals, clinics, and private physicians' 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 x-ray procedures. The role of the graduate radiographer may be that of staff radiographer, special imaging radiographer, supervisor, administrator or educator, depending upon the level of education and experience obtained.

The Bakersfield College Associate in Science Degree radiologic technology (R.T.) program provides concurrent didactic and clinical education. The R.T. program is 24 months in length, once a student has completed the prerequisites for admission.

The program provides the theory and skill experience necessary for employment and to apply for admission to write the certification examination by the American Registry of Radiologic Technologists (ARRT) and the California Certification examination for radiologic technologists, administered by the State of California, Department of Health Services. Students must earn a minimum of a “C” in all radiography and related general education courses and have met all clinical education objectives to be recommended for the above examinations.

R.T. Program Admission Requirements

Required courses must be passed with a minimum grade of “C” (except where otherwise noted) prior to admission to the program.

1. Graduation from high school or equivalent education.
2. Health Science 1 (Anatomy and Physiology)
3. Completion of H.S. Algebra 2 with a minimum grade of “B” or MATH D/200d at B.C.
4. Eligibility for English 1a as demonstrated by qualifying scores on the B.C. assessment tests.
5. Medical Terminology (Medical Science 60).

Admission to the Radiologic Technology Program

The Bakersfield College program admits students every other year (1988, 1990, etc.) in June. Applications must be submitted between September 1 and March 31 for each program sequence prior to the June starting date.
General Education Requirements

Additional courses which may be taken prior to Admission to the R.T. program and which must be completed to meet degree and graduation requirements include:

1. Written and oral communication requirements. (See Graduation Requirements).
2. Philosophy 12.
3. All other graduation requirements of the college must be met to receive the AS Degree in Radiologic Technology. If an individual has previously received an AA degree, a student may apply for the AS degree in Radiologic Technology at Bakersfield College providing all requirements have been met. However, if an individual has previously received an Associate or higher degree, it is not necessary for an individual to work towards the AS degree.

Additional Information

A physical examination completed by a physician of the student's choice 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. Appropriate immunizations are also required. These will be done at the student's expense.

The Radiologic Technology Program is accredited by the Committee on Allied Health Education and Accreditation (CAHEA) in cooperation with the Joint Review Committee on Education in Radiologic Technology (JRCERT) and by the State of California, Department of Health Services.

Expenses

Students will be required to purchase uniform, textbooks, selected equipment, provide transportation to off-campus sites for clinical experience, and pay current college fees.

ASSOCIATE DEGREE RADIOLOGIC TECHNOLOGY PROGRAM

Summer 1 (6 weeks)

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAD T 1 Intr Radiologic Tec</td>
<td>2.0</td>
</tr>
<tr>
<td>MED S 50 Handling Patients</td>
<td>2.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4.0</td>
</tr>
</tbody>
</table>

First Semester (Fall)

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAD T 2a Rad Anat/Position 1</td>
<td>3.0</td>
</tr>
<tr>
<td>RAD T 3a Radiographic Prin 1</td>
<td>3.0</td>
</tr>
<tr>
<td>RAD T 4 Clinic Education 1</td>
<td>6.0</td>
</tr>
<tr>
<td>General Education (if needed)</td>
<td>3.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>12.0-15.0</td>
</tr>
</tbody>
</table>

Second Semester (Spring)

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAD T 2b Rad Anat/Position 2</td>
<td>3.0</td>
</tr>
<tr>
<td>RAD T 3b Radiographic Prin 2</td>
<td>3.0</td>
</tr>
<tr>
<td>DTA P 11 Comp Lit/Hlth Carer</td>
<td>1.0</td>
</tr>
<tr>
<td>RAD T 6 Clinic Education 2</td>
<td>6.0</td>
</tr>
<tr>
<td>General Education (if needed)</td>
<td>3.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>13.0-16.0</td>
</tr>
</tbody>
</table>
### Summer 2 (9 weeks)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAD T 7</td>
<td>Clinical Education 3</td>
<td>7.0</td>
</tr>
</tbody>
</table>

### Third Semester (Fall)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAD T 2c</td>
<td>Rad Anat/Position 3</td>
<td>3.0</td>
</tr>
<tr>
<td>RAD T 9</td>
<td>Intr Spcl Procedures</td>
<td>2.0</td>
</tr>
<tr>
<td>RAD T 10</td>
<td>Clinical Education 4</td>
<td>8.5</td>
</tr>
<tr>
<td>RAD T 5</td>
<td>Radiation Physics</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**TOTAL** 16.5

### Fourth Semester (Spring)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAD T 11</td>
<td>Radgr Pathol/Trminl</td>
<td>3.0</td>
</tr>
<tr>
<td>RAD T 12</td>
<td>Radiatn Safety/Biol</td>
<td>2.0</td>
</tr>
<tr>
<td>RAD T 13</td>
<td>Clinical Education 5</td>
<td>8.5</td>
</tr>
<tr>
<td></td>
<td>General Education (if needed)</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**TOTAL** 13.5-16.5

### Summer 3 (5 weeks)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAD T 14</td>
<td>Clinicl Education 6</td>
<td>4.0</td>
</tr>
</tbody>
</table>

### REGISTERED NURSING

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 nursing faculty believes that nursing is a process in which the nurse interacts with individuals and families in a variety of settings to help achieve and maintain an optimum level of wellness throughout the life span.

The nursing faculty believes that nursing education is best accomplished in an institution of higher learning which provides the broad background necessary for effective nursing practice. The nursing faculty fully endorses the philosophy and goals of Bakersfield College.

The nursing faculty views learning as an interactive dynamic process occurring throughout the life span incorporating problem solving and involving measurable changes of behavior. We believe learning occurs best in an atmosphere of acceptance and encouragement and is facilitated by both faculty and students. The faculty member acts as a facilitator and resource person and serves as a role model of a caring, competent, professional nurse.

The nursing faculty believes that effective learning and change will occur when the student perceives learning experiences as meaningful and directed toward obtainable
goals. Classroom and clinical experiences are selected to meet individual learning needs and learning styles of students. The faculty assists students in developing self-understanding, self-direction, and in achieving learning goals. The attainment of learning goals and objectives is assessed by faculty and students. Final evaluation regarding student performance in meeting objectives is made by faculty.

The curriculum is based upon the following concepts which provide a framework for theory and practice at each level:

1. Utilization of the nursing process to assess, plan, implement, and evaluate nursing care.
2. Man as a bio-psycho-social being.
3. The personal and professional development of the student to prepare for the role of a Registered Nurse.

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 minimum grade of "C" prior to admission to the Program.

1. Graduation from high school or equivalent education.
2. One year of high school Algebra OR MATH A/200a at Bakersfield College.
3. Eligibility for ENGL 1a as demonstrated by qualifying scores on the Bakersfield College assessment tests.
4. Reading competency as demonstrated on the current Bakersfield College reading assessment test. Call 395-4479 for information.
5. CHEM 11 or 2a or 1a at Bakersfield College or an equivalent course at another college. Students who plan to transfer to the B.S.N. Program at Cal State Bakersfield are advised to take CHEM 11.
6. 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 minimum grade of “C” 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 or course meeting the Humanities graduation requirement.
NOTE: Students must meet all graduation requirements of the College to receive the AS/AA Degree in Nursing. Upon completion of all requirements, students enrolled in the Associate Degree Nursing Program will be deemed to have satisfied the Counseling Course Requirement for the Associate in Science or Associate in Arts Degree.

**Additional Information**

A physical examination completed by a physician of the student’s choice 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. Appropriate immunizations are also required. These will be done at the student’s expense.

**Expenses:**

Students will be required to purchase uniform, textbooks, selected equipment, provide transportation to off-campus sites for clinical experience, and pay current College fees.

**ASSOCIATE DEGREE NURSE PROGRAM**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 1</td>
<td>NURS Fundamentals</td>
</tr>
<tr>
<td>NURS 1r</td>
<td>Nsg Fundamentals/Clinic</td>
</tr>
<tr>
<td>H CRS 31</td>
<td>Basic Pharmacology</td>
</tr>
<tr>
<td>PHYSL 1</td>
<td>Intro Physiology</td>
</tr>
<tr>
<td></td>
<td>General Education (if needed)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL 17.0-20.0</td>
<td>TOTAL 14.0-17.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Semester</th>
<th>Fourth Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 3</td>
<td>Nsg Adult Old Age</td>
</tr>
<tr>
<td>NURS 3r</td>
<td>Adult/Old Age Cl Ex</td>
</tr>
<tr>
<td>H CRS 32</td>
<td>Adv Pharmacology</td>
</tr>
<tr>
<td></td>
<td>General Education (if needed)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL 12.0-18.0</td>
<td>TOTAL 10.0-16.0</td>
</tr>
</tbody>
</table>

NOTE: THE CLINICAL COMPONENTS OF ALL NURSING COURSES ARE GRADED ON A CREDIT/NO CREDIT BASIS ONLY.

ADN students are exempt from the maximum of three Credit/No Credit units which may be taken in a semester and from the maximum of twelve Credit/No Credit units which may be applied toward the AA and AS degrees at Bakersfield 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. Proof of current Vocational Nurse Licensure.
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 minimum grade of “C” is required.
5. The following prerequisite courses must be completed before the application will be accepted: COURSES IN PROGRESS WILL NOT BE CONSIDERED: A minimum grade of “C” is required in all prerequisite courses.
   a. CHEM 11, 2a or 1a at Bakersfield College or an equivalent course at another college.
   b. ANAT 1, PHYSL 1, BACT 2 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 1, 2 or 3 taken before Summer 1984 will be accepted in lieu of ANAT 1, PHYSL 1, and BACT 2.)
6. Additional courses which may be taken prior to admission to the Nursing Program and which MUST be completed for the Associate Degree Nursing. A minimum grade of “C” 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 or course meeting the Humanities Graduation Requirement.
7. Challenge Test for Placement (completed within the last two years).
   a. Examination covers content of the second semester of the ADN Program (obstetrics and pediatrics) — a score of 78% must be achieved on the Ob/Peds Challenge Test or lecture courses.
   b. Applicants will be notified by mail of test results.
   c. If scores are below the required level, applicant may request another testing appointment to retake the examination or elect to take a refresher course.
   d. Challenge examination may be taken no more than two times during any one year and only once in a semester.
8. A physical examination completed by a physician of the student's choice 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. Appropriate immunizations are also required. These will be done at the student's expense.

Expenses:

Students will be required to purchase uniform, textbooks, selected equipment, provide transportation to off-campus sites for clinical experience, and pay current College fees.

**Required Nursing Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 3</td>
<td>Nsg Adlt &amp; Old Age</td>
<td>5.0</td>
</tr>
<tr>
<td>NURS 3r</td>
<td>Adult/Old Age Cl Ex</td>
<td>5.0</td>
</tr>
<tr>
<td>NURS 4a</td>
<td>Mental Health Nrsng</td>
<td>3.0</td>
</tr>
<tr>
<td>NURS 4ar</td>
<td>Mnt Hlth/Clinicl Ex</td>
<td>1.5</td>
</tr>
<tr>
<td>NURS 4b</td>
<td>Nrsng Ldrshp</td>
<td>1.5</td>
</tr>
<tr>
<td>NURS 4br</td>
<td>Nsg Ldrlshp/Clinic</td>
<td>1.0</td>
</tr>
<tr>
<td>NURS 5</td>
<td>Critical Care Nurs</td>
<td>2.5</td>
</tr>
<tr>
<td>NURS 5r</td>
<td>Critical Care/Clinic</td>
<td>2.5</td>
</tr>
<tr>
<td>H CRS 32</td>
<td>Adv Pharmacology</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**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.
- **BACT 2** (4 units) — Meets Board of Registered Nursing requirements in Microbiology.
- **NURS 3, 3r** (10 units) — Meets Board of Registered Nursing requirements for advanced medical-surgical nursing, geriatric nursing, and management concepts.
- **NURS 4a, 4ar** (4.5 units) — Meets Board of Registered Nursing requirements for mental health nursing and psychiatric nursing.
- **NURS 4b, 1.5 units** — Meets Board of Registered Nursing requirements for nursing management and leadership principles.
- **NURS 5, 5r** (5 units) — Critical Care Nursing — Courses are designed to increase student's abilities in assessment of the critically ill patient.

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 Requirement:
   a. Proof of current Vocational Nurse Licensure.

Expenses:

Students will be required to purchase uniform, textbooks, selected equipment, provide transportation to off-campus sites for clinical experience, and pay current College fees.

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 determined. 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.
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 minimum grade of "C," or ENGL 1a eligibility.
3. Reading Level 1 or above on the Bakersfield College Placement Test (if below Level 1, 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. ANAT 1 or HL SC 1 with a minimum grade of "C."

NOTE: HL SC 1 will not meet the anatomy prerequisite requirement for the LVN to Associate Degree Nurse Program.

6. Physical Examinations—This exam is to be completed AFTER the student receives notification of selection into the program. The applicant must have a level of emotional and physical health necessary to meet program requirements.

Additional required course:

a. PSYCH 1a (must be completed before graduation).

Additional recommended courses:

a. MED S 60 Medical Terminology.
b. PHIL 12 Death and Dying.

<table>
<thead>
<tr>
<th>Prerequisite Semester</th>
<th>Recommended</th>
<th>UN</th>
<th>First Semester</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 1a</td>
<td>General Psychology</td>
<td>3.0</td>
<td>NURS 1</td>
<td>Nsg Fundamentals</td>
</tr>
<tr>
<td>ANAT 1</td>
<td>Human Anatomy</td>
<td>4.0</td>
<td>NURS 1v</td>
<td>Clinical Pract VN</td>
</tr>
<tr>
<td>MED S 60</td>
<td>Medical Terminology</td>
<td>3.0</td>
<td>H CRS 31</td>
<td>Basic Pharmacology</td>
</tr>
<tr>
<td>MATH 50 (if needed)</td>
<td></td>
<td>3.0</td>
<td>V NRS 63</td>
<td>Integumentary Nrsng</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
<td>TOTAL</td>
<td>13.0</td>
</tr>
<tr>
<td>MATH 250 (if needed)</td>
<td></td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 1 (English if needed)</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>16.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
HEALTH CAREERS 245

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 2v</td>
<td>Clinical Pract</td>
<td>5.0</td>
</tr>
<tr>
<td>V NRS 54</td>
<td>Cardiovascular Nrsng</td>
<td>2.0</td>
</tr>
<tr>
<td>V NRS 56</td>
<td>Gastrointestinal Nsg</td>
<td>2.0</td>
</tr>
<tr>
<td>V NRS 57</td>
<td>Respiratory Nursing</td>
<td>2.0</td>
</tr>
<tr>
<td>V NRS 58</td>
<td>Endocrine Nursing</td>
<td>1.0</td>
</tr>
<tr>
<td>V NRS 60</td>
<td>Orthopedic Nursing</td>
<td>2.0</td>
</tr>
<tr>
<td>V NRS 61</td>
<td>Genitourinary Nrsng</td>
<td>2.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>16.0</td>
</tr>
</tbody>
</table>

Third Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 3v</td>
<td>Clinical Pract VN</td>
<td>8.0</td>
</tr>
<tr>
<td>V NRS 2a</td>
<td>Nsg Assmt/Obstetric</td>
<td>2.5</td>
</tr>
<tr>
<td>V NRS 2b</td>
<td>Nsg Assmt/Pediatric</td>
<td>2.5</td>
</tr>
<tr>
<td>V NRS 62</td>
<td>Neurosensory Nursing</td>
<td>2.0</td>
</tr>
</tbody>
</table>

TOTAL 17.0

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability; **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. **NOTE:** If repeatability is not shown, course may not be repeated.

### DENTAL ASSISTING

**DNT A 50  INTRODUCTION TO DENTAL ASSISTING (3 units)**

Dental practices, employment, and job demands; the dental health team — who they are, their job tasks and licenses; orientation to and maintenance of major dental equipment. **Prerequisite:** Admission to Dental Assisting Program. **Hours:** (54) 18 lect, 36 lab within 2 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Offered in summer only.

**DNT A 51  MATERIALS—PROCEDURES AND INSTRUMENTATION (3 units)**

The manipulation of dental materials in relation to dental procedures along with the sequence of instrumentation found in general dentistry, e.g.: materials, instruments and procedures for completing a silver amalgam filling or a gold crown. **Prerequisites:** Admission to Dental Assisting Program, DNT A 50 with a grade of “C,” or evaluation by instructor. **Hours:** (90) 2 lect, 3 lab. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**DNT A 52  DENTAL ANATOMY AND TERMINOLOGY (3 units)**

Introduction to general anatomy with emphasis on head and neck, teeth and supporting structures, diet and nutrition related to dental health. **Prerequisite:** DNT A 50 with a grade of “C.” **Hours:** (90) 2 lect, 3 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
DNT A 53 BIO-DENTAL SCIENCES (3 units)
Applied aspects of pharmacology, microbiology, pathology, and nutrition which provide a better understanding of scientific principles underlying routine dental assisting procedures. **Prerequisites:** Admission to Dental Assisting Program. DNT A 50, 51, 58a, 60a and 65a with a grade of “C,” or evaluation by instructor. **Hours:** (54) 3 lect/demo. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

DNT A 54 PRINCIPLES OF COMMUNICATION AND PSYCHOLOGY FOR THE DENTAL ASSISTANT (1 unit)
Principles of oral and written communications and psychology for the dental assistant. **Prerequisites:** Admission to Dental Assisting Program. DNT A 50 with a grade of “C.” **Hours:** (18) 2 lect for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

DNT A 55 DENTAL OFFICE PROCEDURES (3 units)
Emphasizes communications, scheduling appointments, making financial arrangements, recall, completing insurance forms and maintaining insurance records and maintaining an inventory of supplies. **Prerequisites:** DNT A 50, 51, 58a, 60a, 65a or evaluation by instructor. **Hours:** (72) 2 lect, 2 lab. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

DNT A 58a CHAIRSIDE OPERATORY TECHNIQUES (3 units)
The principles of four-handed sit-down dentistry, including instrument transfer, oral evacuation, retraction, illumination and proper chair positioning. **Prerequisites:** Admission to Dental Assisting Program. DNT A 50 with a grade of “C,” or evaluation by instructor. **Hours:** (108) 2 lect, 4 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

DNT A 58b CHAIRSIDE OPERATORY TECHNIQUES IN SPECIALTY DENTISTRY (3 units)
Operatory procedures done in the dental specialties offices, including periosurgery, and endodontic. Preventive dentistry including plaque control, analysis, communication and diet evaluation. **Prerequisites:** Admission to Dental Assisting Program. DNT A 50, 51, 58a, and 60a with a grade of “C,” or evaluation by instructor. **Hours:** (90) 2 lect, 3 lab. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

DNT A 59 INTRAORAL PROCEDURES (2 units)
Application of functions in general and specialty dentistry delegated to the dental assistant and registered dental assistant by the California Dental Practice Act. This course is necessary if the student wishes to sit for the Registered Dental Assistant exams for California. **Prerequisites:** Admission to Dental Assisting Program. DNT A 50, 51, 58a, 60a, and 65a with a grade of “C,” or evaluation by instructor. **Hours:** (72) 1 lect, 3 lab. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
DNT A 60a  DENTAL RADIOGRAPHY—CALIFORNIA RADIATION SAFETY COURSE (3 units)
Includes operating x-ray equipment used in dental offices; exposing, processing x-ray film; evaluating film quality. DNT A 60a and 60b, when completed with a grade of “C,” constitute satisfactory completion of the California Radiation Safety Course requirement for those wishing to take dental x-rays in California. A certificate of completion will be issued upon such satisfactory completion. Prerequisite: Admission to Dental Assisting Program or evaluation by instructor. Hours: (108) 2 lect, 4 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

DNT A 60b  DENTAL RADIOGRAPHY—CALIFORNIA RADIATION SAFETY COURSE (2 units)
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. DNT A 60a and 60b, when completed with a grade of “C,” constitute satisfactory completion. Prerequisite: DNT A 60a with a grade of “C.” Hours: (72) 1 lect, 3 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

DNT A 65a  INTERMEDIATE CHAIRSIDE ASSISTING (3 units)
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. (e.g.: 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. Prerequisites: Admission to Dental Assisting Program. DNT A 50 with a grade of “C.” Also need a grade of “C” at mid-term of fall semester in DNT A 51 and 58a. Hours: (126) 1 hour seminar commencing on the 1st week and 12 clinic per week commencing the 10th week. CCS: Occupational Education. Not Transferable: Associate Degree only.

DNT A 65b  ADVANCED CHAIRSIDE AND OFFICE ASSISTING (6 units)
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. Prerequisites: Admission to Dental Assisting Program. DNT A 50, 51, 58a, 60a and 65a with a grade of “C.” Hours: (306) 1 hour seminar per week on campus and 16 in clinic per week commencing in the first week of the semester. CCS: Occupational Education. Not Transferable: Associate Degree only.

EMERGENCY MEDICAL TECHNICIAN

EMT 1  EMERGENCY MEDICAL CARE (4 units)
Provides the student with an understanding of the skills and assessment techniques needed to care for an ill or injured person in the pre-hospital setting. Closely follows the state Regulations for EMT-1A training and leads to certification at the county level. Required for ambulance personnel, the California Highway Patrol (CHP) and many other
first care providers. **Prerequisite:** Must be at least 18 years of age by the end of class. **Hours:** (120) 8 lect/lab per week for 13 weeks, plus 16 ER/Ambulance experience. **Repeat:** As necessary for state EMS regulations. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**EMT 1r:** **EMERGENCY MEDICAL TECHNICIAN I**
**RECERTIFICATION PREPARATION (1 unit)**
Provides a review of the material taught in the primary class for Emergency Medical Technicians, including updates on EMT issues and new material or skill techniques that have been approved since previous certification or recertification class. Closely follows California State regulations and leads to a recertification-completion certificate. Required to continue practice of pre-hospital emergency care. **Prerequisite:** Current EMT certification or certification that has expired in less than one year. **Hours:** (27) 8 lect/lab/testing per week for 3 weeks, plus 3 hours by arrangement. **Repeat:** As often as necessary for recertification. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**HEALTH CAREERS**

**H CRS 31:** **BASIC PHARMACOLOGY (2 units)**
The mathematics or 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. Equivalent to Nursing 337 at CSB. **Prerequisite:** Admission to RN or VN Nursing Program, Allied Health Workers, or evaluation by instructor. **Hours:** (36) 2 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

**H CRS 32:** **ADVANCED PHARMACOLOGY (2 units)**
Designed to provide the student with an understanding of nursing concepts related to adult intravenous therapy. Medication dosage calculation, principles of intravenous therapy, and intravenous drug administration will be presented. Required for all third semester ADN students. **Prerequisite:** Enrollment in the third semester RN Program or current LVN/RN licensure. **Hours:** (36) 2 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

**H CRS 33:** **INTRANOSOUS THERAPY (1.5 units)**
Designed to enable the LVN or RN to safely initiate and maintain intravenous therapy in the hospital setting. LVN's successfully completing the course will be certified by the California Board of Vocational Nurse Examiners to initiate and superimpose intravenous fluids and receive 26 CE hours. RN's and LVN's not requiring state certification will receive 24 CE hours when not completing the clinical portion of the course. **Prerequisites:** California RN or LVN license or junior standing in an RN Program, or evaluation by instructor; must be employed by a health facility which will provide the six hours clinical experience. **Hours:** (30) 24 lect plus 6 clinical experience. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.
HEALTH CAREERS 249

H CRS 34  BASIC CARDIAC RHYTHM INTERPRETATION (2.5 units)
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. Thirty CE hours will be given upon successful completion of course. **Prerequisite:** Allied Health Workers. **Hours:** (45) 2½ lect. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

H CRS 50  ADVANCED VN PHARMACOLOGY (2 units)
Designed to prepare the student VN to function safely as a medicine nurse in a hospital unit. Includes responsibilities of the medication nurse, drug abuse, drug effects on laboratory tests, drug incompatibilities and interactions and patient teaching. **Prerequisite:** Third semester status in VN Program or evaluation by instructor. **Hours:** (36) 2 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MEDICAL SCIENCE

MED S 50  HANDLING PATIENTS (2 units)
Basic nursing care requirements for all patients and those requiring special handling. Instruction and demonstration in medical and surgical asepsis, body mechanics, vital signs, medical emergencies, drug and contrast media administration and isolation techniques. **Prerequisite:** Acceptance in the Radiologic Technology Program. **Hours:** (36) 2 lect/demo for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Offered in summer session only.

MED S 60  MEDICAL TERMINOLOGY (3 units)
Designed to provide the student with an understanding of basic medical terms related to the major body systems. **Prerequisite:** None. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

RADIOLOGIC TECHNOLOGY

RAD T 1  INTRODUCTION TO RADIOLOGIC TECHNOLOGY (2 units)
Orientation to the role of the Radiologic Technologist as an integral part of the health care team. The medical use of radiation, interpersonal communication, medical ethics, radiation safety regulations and protection, foundations and futures of medicine and radiology, hospital and departmental operations, professional development and quality assurance are stressed. **Prerequisite:** Acceptance in the Radiologic Technology Program. **Hours:** (36) 6 lect for 6 weeks. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges. **Note:** Offered in summer session only.

RAD T 2a  RADIOGRAPHIC ANATOMY AND POSITIONING 1 (3 units)
Instruction and practical experience in the radiographic positioning of the patient for proper visualization of structures on the radiograph with film correlation in anatomy. **Prerequisites:** Concurrent enrollment in Radiologic Technology Program; a minimum grade of “C” in RAD T 1 and RAD T 50. **Hours:** (90) 2 lect, 3 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.
RAD T 2b  RADIOGRAPHIC ANATOMY AND POSITIONING 2 (3 units)
Instruction and practical experience in the radiographic positioning of the patient, including radiographic film correlation of anatomy. **Prerequisites:** Concurrent enrollment in Radiologic Technology Program; a minimum grade of “C” in RAD T 2a. **Hours:** (90) 2 lect, 3 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

RAD T 2c  RADIOGRAPHIC ANATOMY AND POSITIONING 3 (3 units)
Instruction and practical experience in radiographic positioning of the patient, including radiographic film correlation of anatomy. **Prerequisites:** Concurrent enrollment in the Radiologic Technology Program; a minimum grade of “C” in RAD T 2b. **Hours:** (90) 2 lect, 3 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

RAD T 3a  RADIOGRAPHIC PRINCIPLES 1 (3 units)
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, the physical factors of photographic processing and quality assurance. **Prerequisites:** Completion of RAD T 1 and MED S 50 with a minimum grade of “C” and concurrent enrollment in RAD T 2a and RAD T 4. **Hours:** (90) 2 lect, 3 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

RAD T 3b  RADIOGRAPHIC PRINCIPLES 2 (3 units)
Principles of producing the optimum radiograph, manipulation of exposure factors, radiographic techniques, and technique chart construction. Instruction in the use of accessory equipment in obtaining the optimum radiograph stressing radiation safety and quality control techniques are provided. **Prerequisites:** Completion of RAD T 3a with a minimum grade of “C” and concurrent enrollment in RAD T 2b and RAD T 6. **Hours:** (90) 2 lect, 3 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

RAD T 4  CLINICAL EDUCATION 1 (6 units)
Supervised clinical experiences are provided to perfect skills in a variety of basic radiographic procedures. Case studies of radiographic procedures discussing the fundamentals of anatomy, positioning and technical factors of film quality are analyzed on a case-by-case basis. Correlated with RAD T 2a. **Prerequisites:** Acceptance in Radiologic Technology Program and completion of RAD T 1. **Hours:** (288) 16 clinical experience to include one hour lecture. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

RAD T 5  RADIATION PHYSICS (3 units)
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. **Prerequisite:** Enrollment in Radiologic Technology Program. **Hours:** (90) 2 lect, 3 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

RAD T 6  CLINICAL EDUCATION 2 (6 units)
Supervised clinical experiences are provided to perfect skills in a variety of basic radiographic procedures. Case studies of radiographic procedures discussing the fundamentals of anatomy, positioning and technical factors of film quality are analyzed on
a case-by-case basis. Correlated with RAD T 2b. **Prerequisite:** Completion of first semester of Radiologic Technology Program with minimum grades of “C.” **Hours:** (288) 16 clinical experience to include one hour lecture. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

**RAD T 7  CLINICAL EDUCATION 3 (7 units)**
Supervised clinical experiences are provided to perfect skills in a variety of radiographic procedures. Case studies of radiographic procedures discussing the fundamentals of anatomy, positioning and technical factors of film quality are analyzed on a case-by-case basis. Extension of radiographic procedures demonstrated in RAD T 2a, 2b. **Prerequisite:** Completion of second semester of Radiologic Technology Program with minimum grades of “C.” **Hours:** (360) 40 hours clinical experience for 9 weeks to include two hours lecture. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

**RAD T 9  INTRODUCTION TO ANGIOGRAPHY AND PARARADIOLOGIC IMAGING MODALITIES (2 units)**
Orientation to neuroradiographic and angiographic examinations including special equipment requirements, supplies, techniques and applications. Introduction to auxiliary imaging modalities, including digital radiography, computer tomography, diagnostic medical sonography, thermography, magnetic resonance, nuclear medicine and radiation therapy. **Prerequisite:** Completion of first year of Radiologic Technology Program with minimum grades of “C” and concurrent enrollment in RAD T 2c. **Hours:** (36) 2 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

**RAD T 10  CLINICAL EDUCATION 4 (8.5 units)**
Supervised clinical experiences are provided to perfect skills in advanced radiographic procedures. Case studies of radiographic procedures discussing anatomy, pathology, positioning and technical factors of image quality are analyzed on a case-by-case basis. Correlated with RAD T 2c. **Prerequisite:** Completion of first year of Radiologic Technology Program including Clinical Education 3 with minimum grades of “C.” **Hours:** (432) 24 hours clinical experience to include one hour lecture. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

**RAD T 11  RADIOGRAPHIC PATHOLOGY AND TERMINOLOGY (3 units)**
Introduction to medical pathology and terminology relative to radiologic examination. Nature and cause of disease, definitions of terms, review of anatomical and pathological structure and function, disease manifestations and radiographic findings. **Prerequisites:** Enrollment in Radiologic Technology Program, RAD T 2c with a minimum grade of “C” and concurrent enrollment in RAD T 13. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

**RAD T 12  RADIATION SAFETY AND BIOLOGY (2 units)**
Fundamental concepts of radiation protection with review of current California Health and Safety codes pertaining to x-ray technology. Biological effects on living systems, as well as radiation units, dose determinations, and personnel monitoring. **Prerequisite:** Current enrollment in Radiologic Technology Program. **Hours:** (36) 2 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.
RAD T 13  CLINICAL EDUCATION 5 (8.5 units)
Supervised clinical experiences are provided to perfect skills in advanced radiographic procedures. Case studies of radiographic procedures discussing anatomy, pathology, positioning and technical factors of image quality are analyzed on a case-by-case basis. Extension of radiographic procedures demonstrated in RAD T 2a, 2b, 2c and RAD T 9.
**Prerequisite:** Completion of third semester of Radiologic Technology Program with minimum grades of "C."  
**Hours:** (432) 24 hours clinical experience to include one hour lecture.  
**CCS:** Occupational Education.  
**Transferable:** CSU and Private Colleges.

RAD T 14  CLINICAL EDUCATION 6 (4 units)
An intensive advanced clinical experience to prepare the student for program completion and for state and national diagnostic radiologic technology examinations. An intensive analysis, on a case-by-case basis, of radiographic anatomy, pathology, positioning and technical factors of image quality is performed.  
**Prerequisite:** Completion of fourth semester of Radiologic Technology Program with minimum grades of "C."  
**Hours:** (200) 40 hours clinical experience to include 3 hours lecture per week for 5 weeks.  
**CCS:** Occupational Education.  
**Transferable:** CSU and Private Colleges.

REGISTERED NURSING

NURS 1  NURSING FUNDAMENTALS (5 units)
Provides a foundation of basic nursing arts and sciences necessary for the practice of nursing. Orientation of the nursing student to college policies for graduation is discussed. The evolution of nursing is discussed and trends identified. An understanding of the nursing process is developed. Concepts of man as a bio-psycho-social being, health care practices, concepts for professional nursing practice, communication, asepsis, mobility, comfort and safety, nutrition, fluid homeostasis, oxygenation, elimination, pre-operative care, orthopedic care, cultural diversities and legal aspects are presented. Special nursing needs of the geriatric client, the client with long-term illness, the client experiencing loss, and the dying client are presented. Satisfies the 0.5 unit counseling requirement for graduation from Bakersfield College.  
**Prerequisite:** Admission to the ADN or VN Program or evaluation by instructor.  
**Hours:** (90) 5 lect.  
**CCS:** Occupational Education.  
**Transferable:** CSU and Private Colleges.

NURS 1r  NURSING FUNDAMENTALS/LABORATORY EXPERIENCE (5 units)
Correlated laboratory experiences are provided with clients from the young adult to the geriatric client who have basic health problems. Concepts presented in NURS 1 are applied in the medical-surgical and orthopedic units of various hospitals. The student is guided by specific measurable laboratory objectives for each learning experience.  
**Prerequisite:** Concurrent enrollment in NURS 1.  
**Hours:** (270) 15 clinical experience.  
**CCS:** Occupational Education.  
**Transferable:** CSU and Private Colleges.

NURS 2a  NURSING ASSESSMENT-OBSTETRICS (2.5 units)
A holistic approach to nursing care of the Obstetric and Newborn patient, including preventive, remedial, supportive and teaching aspects of nursing intervention.  
**Prerequisite:** NURS 1 and 1r; or NURS IV and ANAT 1 or HL SC 1 with a minimum grade of "C"; or evaluation by instructor.  
**Hours:** (45) 2½ lect.  
**CCS:** Occupational Education.  
**Transferable:** CSU and Private Colleges.
NURS 2ar  OBSTETRICAL LABORATORY EXPERIENCE (2.5 units)
Lab experience to introduce the student to nursing care of the labor, delivery, post-partum and newborn patient with application of concepts presented in NURS 2a. **Prerequisite:** Appropriate standing in the ADN Program or evaluation by program director. **Hours:** (135) 15 clinical experience for 9 weeks. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

NURS 2b  NURSING ASSESSMENT-PEDIATRICS (2.5 units)
Focuses on nursing interventions in preventative, remedial, supportive, rehabilitative and teaching aspects of nursing from birth through adolescence. A holistic, i.e., bio-psychosocial approach to nursing care is applied. Concepts of wellness and growth and development are presented and these formulate a basis for the study of illness in children. Nursing process is the basis of in-depth study of illnesses specific to pediatrics. Concepts of nutrition, communication, safety, human sexuality, cultural diversities/ethnicity, pharmacology, child abuse issues are discussed as they relate to growth and development of children. The role of the nurse and nurse management/leadership is expanded. Community health aspects of pediatrics is introduced. **Prerequisite:** Appropriate standing in ADN Program or evaluation by instructor. **Hours:** (45) 2½ lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

NURS 2br  PEDIATRIC NURSING LABORATORY EXPERIENCE (2.5 units)
Correlated laboratory experiences introduce the student to nursing care of children and the common problems and illnesses of children with application of concepts from NURS 2b. Students are guided by specific laboratory objectives. **Prerequisite:** Appropriate standing in the ADN Program or evaluation by program director. **Hours:** (135) 15 clinical experience for 9 weeks. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

NURS 3  NURSING ASSESSMENT AND HEALTH PROMOTION – ADULT THROUGH OLD AGE (5 units)
Continues the study of nursing interventions in prevention, remedial, supportive, rehabilitative and teaching aspects of nursing throughout the life span. Focuses on man as a bio-psychosocial being. Concepts of role, asepsis, communication, safety and comfort, mobility, nutrition, health-wellness, teaching, personal hygiene, cultural diversities/ethnicity, community health, pharmacology, nurse management and leadership are presented and integrated throughout the course. Focuses on health concerns of the young adult, middle-aged and aged persons. Nursing process provides the framework for deliberative nursing interventions presented throughout the course. **Prerequisite:** Completion of the first year of nursing program or equivalent with a minimum grade of “C”; completion of ANAT 1, PHYSL 1, and BACT 2 or evaluation by program director. **Hours:** (90) 5 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.
NURS 3r NURSING LABORATORY EXPERIENCE/ASSESSMENT AND HEALTH PROMOTION – ADULT THROUGH OLD AGE (5 units)
Correlated clinical experiences are provided with emphasis from the young adult to the geriatric client who have complicated health problems. Concepts presented in NURS 3 are applied in a variety of hospital settings. The student is guided by specific measurable laboratory objectives for each learning experience. Prerequisite: Appropriate standing in the ADN Program or evaluation by instructor. Hours: (270) 15 clinical experience. CCS: Occupational Education. Transferable: CSU and Private Colleges.

NURS 4a MENTAL HEALTH/PSYCHIATRIC NURSING (3.0 units)
Focuses on the psycho-social aspects of nursing care throughout the life span. Concepts of mental health and mental illness are presented. Human sexuality, alcoholism and drug dependency are discussed in depth. The nursing process is used as the framework for study of the preventive, supportive, rehabilitative and teaching aspects of nursing interventions for the person experiencing psycho-social stress. The therapeutic nurse-patient relationship is emphasized. Prerequisite: NURS 3 and NURS 3r with a minimum grade of “C” or evaluation by instructor. Hours: (54) 3 lect. CCS: Occupational Education. Transferable: CSU and Private Colleges.

NURS 4ar MENTAL HEALTH NURSING LABORATORY EXPERIENCE (1.5 units)
Laboratory experiences are provided with clients experiencing mental health and chemical dependency problems. Concepts presented in NURS 4a are applied in a variety of community settings. Students are guided by specific measurable laboratory objectives for each learning experience. Prerequisite: Appropriate standing in the ADN Program or evaluation by program director. Hours: (81) 9 clinical experience for 9 weeks. CCS: Occupational Education. Transferable: CSU and Private Colleges.

NURS 4b NURSING LEADERSHIP (1.5 units)
Examines leadership and management concepts and principles. The legal, social, and ethical aspects of nursing practice are emphasized. Prepares the student for the leadership role expected of a registered nurse. Prerequisite: NURS 3 and NURS 3r with a minimum grade of “C” or evaluation by instructor. Hours: (27) 1½ lect. CCS: Occupational Education. Transferable: CSU and Private Colleges.

NURS 4br NURSING LEADERSHIP LABORATORY EXPERIENCE (1 unit)
Concepts and principles of nursing leadership and management are applied in the clinical setting. Prerequisite: Appropriate standing in the ADN Program or evaluation by program director. Hours: (54) 3 clinical experience. CCS: Occupational Education. Transferable: CSU and Private Colleges.

NURS 5 CRITICAL CARE NURSING (2.5 units)
Designed to enable students to apply the nursing process safely and effectively in critical care situations. Prerequisite: Appropriate standing in the ADN Program. Concurrent enrollment in NURS 5r is required. Hours: (45) 2½ lect. CCS: Occupational Education. Transferable: CSU and Private Colleges.
HEALTH CAREERS

NURS 5r CRITICAL CARE NURSING LABORATORY EXPERIENCE (2.5 units)
Designed to enable the student to apply the nursing process safely and effectively in critical care situations. **Prerequisite:** Appropriate standing in the ADN Program or evaluation by program director. Concurrent enrollment in NURS 5 is required. **Hours:** (135) 15 clinical experience for 9 weeks. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

VOCATIONAL NURSING

NURS 1 NURSING FUNDAMENTALS (5 units)
Provides a foundation of basic nursing arts and sciences necessary for the practice of nursing. Orientation of the nursing student to college policies for graduation is discussed. The evolution of nursing is discussed and trends identified. An understanding of the nursing process is developed. Concepts of man as a bio-psycho-social being, health care practices, concepts for professional nursing practice, communication, asepsis, mobility, comfort and safety, nutrition, fluid homeostasis, oxygenation, elimination, pre-operative care, orthopedic care, cultural diversities and legal aspects are presented. Special nursing needs of the geriatric client, the client with long-term illness, the client experiencing loss, and the dying client are presented. Satisfies the 0.5 unit counseling requirement for graduation from Bakersfield College. **Prerequisite:** Admission to the ADN or VN Program or evaluation by instructor. **Hours:** (90) 5 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

NURS 1v-2v-3v CLINICAL PRACTICE-VOCATIONAL NURSING (5–5–8 units)
Correlated with the didactic phase of the VN Program to provide clinical experiences within a nursing care facility. **Prerequisite:** Appropriate standing in VN Program. **Hours:** (288-288-432) NURS 1v and 2v—16 clinical lab experience; NURS 3v—24 clinical lab experience. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

V NRS 54 CARDIOVASCULAR NURSING (2 units)
A study of the etiology, diagnostic procedures, symptomatology, dietary needs, treatment and nursing care of patients of all ages with illnesses affecting the cardiovascular system. **Prerequisite:** Appropriate standing in VN Program. **Hours:** (36) 4 lect for 9 weeks. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

V NRS 56 GASTROINTESTINAL NURSING (2 units)
A study of the etiology, symptomatology, treatment and nursing care of patients of all ages, with illnesses affecting the gastrointestinal system. **Prerequisite:** Appropriate standing in VN Program. **Hours:** (36) 4 lect for 9 weeks. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.
V NRS 57  RESPIRATORY NURSING (2 units)
A study of the causes, signs and symptoms, medication, treatment and nursing care of patients of all ages, with illnesses affecting the respiratory system. **Prerequisite:** Appropriate standing in VN Program. **Hours:** (36) 4 lect for 9 weeks. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

V NRS 58  ENDOCRINE NURSING (1 unit)
A study of the etiology, symptomatology, treatment, dietary needs, and nursing care of patients of all ages, with disorders of the endocrine system. **Prerequisite:** Appropriate standing in VN Program. **Hours:** (18) 2 lect for 9 weeks. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

V NRS 60  ORTHOPEDIC NURSING (2 units)
A study of the disease conditions of the musculoskeletal system in relation to causes, symptoms, diet, medications, nursing care, psychological approach, prevention and rehabilitation. **Prerequisite:** Appropriate standing in VN Program. **Hours:** (36) 4 lect for 9 weeks. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

V NRS 61  GENITOURINARY NURSING (2 units)
A study of the etiology, symptomatology, treatment, dietary needs, and nursing care of genitourinary conditions in patients of all ages. **Prerequisite:** Appropriate standing in VN Program. **Hours:** (36) 4 lect for 9 weeks. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

V NRS 62  NEUROSENSORY NURSING (2 units)
A study of the etiology, symptomatology, diagnostic procedures, treatment and nursing care of neurosensory conditions in patients of all ages. **Prerequisite:** Appropriate standing in VN Program. **Hours:** (36) 2 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

V NRS 63  INTEGUMENTARY NURSING (1 unit)
A study of the etiology, symptomatology, treatment and nursing care of conditions of the integumentary system in patients of all ages. **Prerequisite:** Appropriate standing in VN Program. **Hours:** (18) 1 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.
HEALTH AND PHYSICAL EDUCATION

Advisory

Health Education

Physical Education
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 a transfer program.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH ED 40</td>
<td>Intro Physical Educ</td>
<td>2.0</td>
</tr>
<tr>
<td>PH ED 41</td>
<td>Recreation Leadership</td>
<td>2.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PH ED 42</td>
<td>Community Recreation</td>
<td>2.0</td>
</tr>
<tr>
<td>ANAT 1</td>
<td>Human Anatomy</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYSL 1</td>
<td>Human Physiology</td>
<td>5.0</td>
</tr>
<tr>
<td>PH ED 31a</td>
<td>Standard First Aid</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Other Suggested Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>H ED 5</td>
<td>Substance Awareness</td>
<td>1.0</td>
</tr>
<tr>
<td>PH ED 39a</td>
<td>Prv/Care Athl Injur</td>
<td>3.0</td>
</tr>
</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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH ED 42</td>
<td>Commnty Recreatn</td>
<td>2.0</td>
</tr>
<tr>
<td>PH ED 41</td>
<td>Recreatn Leadership</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Other Suggested Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH ED 35a</td>
<td>Pro Act M/W Ten/Glf</td>
<td>2.0</td>
</tr>
<tr>
<td>PH ED 35c</td>
<td>Pro Act M/W Aqu/TrF</td>
<td>2.0</td>
</tr>
</tbody>
</table>
COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: lect lecture; lab laboratory; demo demonstration; Repeat repeatability; CCS Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. NOTE: If repeatability is not shown, course may not be repeated.

HEALTH EDUCATION

H ED 1 PRINCIPLES OF HEALTH EDUCATION (2 units)
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, drug abuse, and their effects upon the body, environmental health, consumer affairs, communicable diseases and chronic disorders. Prerequisite: Reading Level 1. Hours: (36) 2 lect/discussion. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

H ED 5 ALCOHOL, DRUG, AND SUBSTANCE AWARENESS (1 unit)
Provides the student athlete with a history of drug use in athletics, its short and long term effects; damage to body. Knowledge of drugs in athletic performances, pros and cons of drug screening and/or testing — its legal implications and use of alcohol in the athletic community will be discussed. Prerequisite: None. Hours: (18) 1 lect. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

PHYSICAL EDUCATION

PH ED 3adp THROUGH 9
Prerequisite: None unless otherwise stated. Hours: (18-36) 2 hours participation unless otherwise indicated. Repeat: Activity courses, 3adp through 9, may be repeated 3 times. Example: 6T (Tennis)—A student may take four tennis classes—all four beginning or intermediate or advanced or any combination of those equaling four enrollments. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

PH ED 3adp ADAPTIVE PHYSICAL EDUCATION (1 unit)
Individualized fitness programs for the disabled, combined with group physical education activities.

PH ED 5 TEAM ACTIVITIES FOR WOMEN (1 unit)
5sc—women's soccer, 5wsb—softball.
PH ED 6  COEDUCATIONAL
TEAM AND INDIVIDUAL ACTIVITIES (1 unit)
6a—archery, 6b—bowling, 6bad—badminton, 6bb—basketball, 6blb—beginning
ballet, 6bli—intermediate ballet, 6ct—circuit training, 6g—golf, 6gi—intermediate
golf, 6hx—health exercises, 6jd—jazz dance, 6ls—life saving, 6m—body mechanics,
6md—modern dance, 6mdi—intermediate modern dance, 6mi—intermediate body
mechanics (1.5 units. Prerequisite: PH ED 6pf or evaluation by instructor.),
6pf—physical fitness, 6r—racquetball, 6s—swimming, 6sf—swim and stay fit,
*6sk—dry skiing (snow), 6skc—ski conditioning, *6ski—intermediate dry skiing
(snow), 6t—tennis, 6ti—intermediate tennis, 6v—volleyball, 6vi—intermediate
volleyball, 6wsi—water safety.

*One ski trip during semester required.

PH ED 7 ADVANCED
TEAM AND INDIVIDUAL ACTIVITIES FOR MEN (1 unit)
7b—advanced baseball, 7fb—advanced football, 7tr—advanced track, 7w—advanced
wrestling. Prerequisite: Completion of a basic course in the activity. Some ac-
tivities require weekend field trips.

PH ED 8 ADVANCED TEAM ACTIVITIES FOR WOMEN (1 unit)
8tr—advanced track and field. Prerequisite: Completion of a basic course in the ac-
tivity.

PH ED 9 ADVANCED
TEAM AND INDIVIDUAL COEDUCATIONAL ACTIVITIES (1 unit)
9s—advanced swimming, *9sk—advanced dry skiing (snow), 9t—advanced tennis,
Prerequisite: Completion of a basic course in the activity.

*One ski trip during semester required.

INTERCOLLEGIATE ATHLETICS

Athletic Code Eligibility Requirements

An athlete must be continuously enrolled in a minimum of 12 units during the season
of competition. Those, competing in a sport, must successfully complete 24 units to be
eligible for a second season of competition. A 2.0 grade point average must be main-
tained to be eligible to participate.

Intercollegiate Competition for Men.

Prerequisite: Must meet athletic code eligibility requirements. Hours: (180) 10 hours
by arrangement (usually 2 hours per day). Repeat: Athletic courses, 10 through 20,
may be repeated twice unless otherwise indicated. CCS: Liberal Arts and Sciences.
Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific infor-
mation see counselor. Note: May be substituted for physical education requirement for
graduation.
PH ED 10  INTERCOLLEGIATE FOOTBALL (2 units)
PH ED 11  INTERCOLLEGIATE BASKETBALL (Fall—2 units; Spring—1 unit) Repeat: 3.
PH ED 12  INTERCOLLEGIATE TRACK AND FIELD (2 units)
PH ED 13  INTERCOLLEGIATE TENNIS (2 units)
PH ED 14  INTERCOLLEGIATE BASEBALL (2 units)
PH ED 15  INTERCOLLEGIATE SWIMMING (2 units)
PH ED 16  INTERCOLLEGIATE GOLF (2 units)
PH ED 17  INTERCOLLEGIATE CROSS-COUNTRY (2 units)
PH ED 18  INTERCOLLEGIATE SOCCER (2 units)
PH ED 20  INTERCOLLEGIATE WRESTLING (2 units)

Intercollegiate Competition for Women

Prerequisite: Must meet athletic code eligibility requirements. Hours: (180) 10 hours by arrangement (usually 2 hours per day). Repeat: Athletic courses, 21 through 29, may be repeated twice unless otherwise indicated. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor. Note: May be substituted for physical education requirement for graduation.

PH ED 21  WOMEN'S INTERCOLLEGIATE SWIMMING (2 units)
PH ED 22  WOMEN'S INTERCOLLEGIATE TENNIS (2 units)
PH ED 23  SOCCER (2 units)
PH ED 25  WOMEN'S INTERCOLLEGIATE VOLLEYBALL (2 units)
PH ED 26  WOMEN'S INTERCOLLEGIATE TRACK AND FIELD (2 units)
PH ED 27  WOMEN'S INTERCOLLEGIATE CROSS-COUNTRY (2 units)
PH ED 28  WOMEN'S INTERCOLLEGIATE BASKETBALL (Fall—2 units; Spring—1 unit) Repeat: 3.
PH ED 29  WOMEN'S INTERCOLLEGIATE SOFTBALL (2 units)

PH ED 31a STANDARD FIRST AID (1 unit)
Administering first aid in emergency and accident situations. Includes wounds and their care, shock, artificial respiration, C.P.R., injuries, burns, effects of heat and cold and the transportation of the injured. Upon successful completion of the course each student will qualify for an American Red Cross Standard First Aid card. Prerequisite: None. Hours: (18) 2 lect/disc for 9 weeks. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.
PH ED 32 SHAPE UP (3 units)
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. Prerequisite: 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. Hours: (108) 6 participation. Repeat: 3. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

PH ED 35a – 35b – 35c – 35d PROFESSIONAL ACTIVITIES FOR MEN AND WOMEN (2 – 2 – 2 – 2 units)
35a—tennis/golf, 35b—racquet sports/foundations of fitness, 35c—aquatics/track and field, 35d—team sports. Prerequisite: None. Hours: (54 each) 3 lect/lab. Repeat: 3. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

PH ED 39a PREVENTION AND CARE OF ATHLETIC INJURIES (3 units)
Designed to introduce the student to techniques, procedures and basic information regarding the treatment and prevention of athletic injuries. Includes preventative bandaging and taping methods, along with rehabilitation and conditioning programs. Injury mechanism will also be discussed. Prerequisite: None. Hours: (90) 2 lect, 3 lab. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

PH ED 39b ADVANCED CARE AND PREVENTION OF ATHLETIC INJURIES (3 units)
Evaluation, rehabilitation, and prevention of athletic injuries will be covered with additional exposure to various physical therapy modalities and prevention of injuries. The athletic trainer will properly advise students who take this course of limitations and proper skills applications. Prerequisite: ANAT 1, PE 39a, or evaluation by instructor. Reading Level 1. Hours: (90) 2 lect, 3 lab by arrangement. Field trips required. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

PH ED 40 INTRODUCTION TO PHYSICAL EDUCATION (2 units)
Exploring employment opportunities in the field of physical education, history and teaching of physical education the the contribution made to the mental, social and physical well-being of society. Prerequisite: Major or minor in Physical Education or Recreation. Reading Level 1 or evaluation by instructor. Hours: (36) 2 lect/disc. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

PH ED 41 RECREATION LEADERSHIP (2 units)
Survey of employment opportunities in the field of recreation. Students will learn the meaning and scope of recreation leadership, the problems of organization, types of activities, and elements of leadership. Prerequisite: Major or minor in the field of recreation and physical education. Reading Level 1 or evaluation by instructor. Hours: (36) 2 lect/disc. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.
PH ED 45 THEORY OF FOOTBALL (2 units)
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. Prerequisite: Student should be a major or minor in physical education although the course may be taken as an elective. Hours: (90) 5 lect. Repeat: 2. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

PH ED 52 CARDIOPULMONARY RESUSCITATION (0.5 unit)
Designed to provide certification or recertification in CPR. Follows the Red Cross format. Successful completers will receive Red Cross Certification. Prerequisite: None. Hours: (9) 9 lect. Repeat: 3. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.

PH ED 53a TRACK AND FIELD TECHNIQUE (2 units)
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. Prerequisite: None. Hours: (36) 3 lect. Repeat: 3. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.

PH ED 53b METHODS IN TRACK AND FIELD (2 units)
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. Prerequisite: None. Hours: (36) 2 lect. Repeat: 3. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.

PH ED 71b WATER SAFETY INSTRUCTOR’S TRAINING (1 unit)
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. Prerequisite: Current senior life saving card. Hours: (36) 12 hrs for 3 weeks. CCS: Occupational Education. Not Transferable: Associate Degree only.

PH ED 72 LIFEGUARD TRAINING (1 unit)
Prepares the student to meet the Red Cross certification requirements for lifeguard training. Prerequisite: Possession of the following: (1) A current CPR card, (2) a current Red Cross First Aid Certificate, (3) a current Advanced Lifesaving Certificate. Ability to perform the following skills: (1) Swim 500 yards, (2) swim under water, (3) tow a ten-pound diving brick 100 yards using a sidestroke or elementary backstroke, (4) surface dive to the depth of 8-12 feet, recovering a ten-pound diving brick and return with brick to starting point. Hours: (24) 24 lect/lab. Repeat: 3. CCS: Occupational Education. Not Transferable: Associate Degree only.

PH ED 75 FITNESS FOR LIVING (1 unit)
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. Prerequisite: None. Hours: (36) 2 hours participation. Repeat: 3. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.
INDUSTRIAL TECHNOLOGY

Aeronautics
Air Conditioning and Refrigeration
Apprenticeship
Auto Body and Refinishing
Construction Technology
Electrical/Electronics
Industrial Technology
Machine Tool/Numerical Control Technology
Mechanical Technology
Petroleum Technology
Surveying
Welding Technology
Woodworking Technology

The Industrial Technology Department offers students the opportunity to select among several career options that prepare them for industrial-technical occupations. Entry level through advanced vocational training is available.

Students should develop programs with the aid of departmental counselor or advisor. Studies may lead to short term career goals, the Certificate of Completion or the Associate Degree. Students may also choose lower division courses that transfer 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 and the earliest possible opportunity for job placement and/or the establishment of a small business. Students may continue toward more advanced courses, an associate degree, or transfer to a four-year institution.

Programs offering these specialized certificates include: Automotive Brakes and Wheel Alignment, Engine Overhaul, Automatic Transmission, Repair Tune-Up and Emission Control, Cabinetmaking, Computer Aided Manufacturing, Electronics Technology, Machine Tool Metalworking, Surveying, and Welding. Each program consists of basic requirements and suggested electives. Electives should be selected in consultation with faculty advisors and counselors.

Upon completion of the requirements, the student may apply for a Certificate of Achievement. Certificates are awarded upon recommendation by lead instructors and the department chairperson.
AUTO BODY CERTIFICATE

Minimum units required — 27

Required Courses — 18

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 56a</td>
<td>Auto Body/Repair</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO 56b</td>
<td>Auto Body/Repair</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO 56c</td>
<td>Auto Body Refinshng</td>
<td>3.0</td>
</tr>
<tr>
<td>TEC M 52</td>
<td>Intro Tech Math</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD</td>
<td>1abIntro Weldng Process</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives (Minimum of 9 units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 1</td>
<td>Basic Auto</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO 73</td>
<td>Wheel Alignment</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 74</td>
<td>Disc/Brake Srv</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 103</td>
<td>Auto/Truck Brake</td>
<td>6.0</td>
</tr>
<tr>
<td>AUTO 108</td>
<td>Auto Steer/Suspens</td>
<td>6.0</td>
</tr>
<tr>
<td>AUTO 64a</td>
<td>Auto Electricity</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 63a</td>
<td>Auto Fuel Carb Sys</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 65</td>
<td>Auto Emissn Control</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 59</td>
<td>Auto Air Conditioning</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 64a</td>
<td>Auto Electricity</td>
<td>2.0</td>
</tr>
</tbody>
</table>

AUTO BRAKES AND WHEEL ALIGNMENT CERTIFICATE PROGRAM

Minimum units required — 26

Required Courses (Minimum 18 units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 63a</td>
<td>Auto Fuel Carb Sys</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 103</td>
<td>Auto/Truck Brake</td>
<td>6.0</td>
</tr>
<tr>
<td>AUTO 65</td>
<td>Auto Emissn Control</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 102a</td>
<td>Automotive Engines</td>
<td>12.0</td>
</tr>
<tr>
<td>TEC M 52</td>
<td>Intro Tech Math</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD</td>
<td>1abIntro Weldng Process</td>
<td>3.0</td>
</tr>
<tr>
<td>IND T 275</td>
<td>Spec Prblms/Auto</td>
<td>1-3.0</td>
</tr>
</tbody>
</table>

Electives (Minimum of 8 units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 75a</td>
<td>Intro/Eng Overhaul</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO 75b</td>
<td>Eng Repair Techniq</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO 114</td>
<td>Auto Elec Ignitn Sys</td>
<td>12.0</td>
</tr>
<tr>
<td>AUTO 64a</td>
<td>Auto Electricity</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Other Suggested Courses

AUTO 59 Auto Air Conditioning (2); English (3); IND T 249 Coop Word Exp Ed (4).
AUTO ENGINE OVERHAUL CERTIFICATE PROGRAM

Minimum units required – 27

Required Courses (Minimum of 23 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 102a Automotive Engines</td>
<td>12.0</td>
</tr>
<tr>
<td>AUTO 102b Auto Machining</td>
<td>12.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
</tbody>
</table>

Required Courses (Minimum of 23 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 64a Auto Electricity</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 75a Intro/Eng Overhaul</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO 75b Eng Repair Techniq</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO 75c Adv Eng Overhaul</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO 75d Adv Eng Machining</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH T 1ab Beg Machine Shop</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 1ab Intro Weld Process</td>
<td>3.0</td>
</tr>
<tr>
<td>TEC M 52 Math (Required)</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives (Minimum of 4 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 63a Auto Fuel/Carb Sys</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 65 Emissn Control</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 114 Auto Ele/Ignnt Sys</td>
<td>12.0</td>
</tr>
<tr>
<td>IND T 275 Spec Prblms/Auto</td>
<td>1-3.0</td>
</tr>
<tr>
<td>IND T 249 Coop Work Exp Ed</td>
<td>1-4.0</td>
</tr>
</tbody>
</table>

Other Suggested Courses

AUTO 66 Computer Systems (4), AUTO 59 Auto Air Conditining (2), AUTO 115 Auto Fuel/Emis Cntrl (12); ENGL (3).

AUTOMOTIVE POWER-TRAINS CERTIFICATE PROGRAM
(Formerly Automatic Transmission Certificate)

Minimum units required – 30

Required Courses (Minimum of 23 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 64a Auto Electricity</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 75a Intro/Eng Overhaul</td>
<td>3.0</td>
</tr>
<tr>
<td>TEC M 52 Math (Required)</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives (Minimum of 7 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 1 Basic Auto</td>
<td>6.0</td>
</tr>
<tr>
<td>AUTO 65 Auto Emissn Control</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 108 Auto Steer/Suspens</td>
<td>6.0</td>
</tr>
<tr>
<td>MCH T 1ab Beg Machine Shop</td>
<td>3.0</td>
</tr>
<tr>
<td>IND T 275 Spec Problems/Auto</td>
<td>1-3.0</td>
</tr>
<tr>
<td>IND T 249 Coop Work Exp Ed</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Other Suggested Courses

AUTO 59 Auto Air Conditining (2); ENGL (3); IND T 249 Coop Work Exp Ed (4).
# AUTO TUNE-UP AND EMISSION CONTROL CERTIFICATE PROGRAM

## Minimum units required — 36

### Required Courses (27 units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 114</td>
<td>Auto Ele/Ignition Sys</td>
<td>12.0</td>
</tr>
<tr>
<td>AUTO 115</td>
<td>Auto Fuel Emis Ctrl</td>
<td>12.0</td>
</tr>
<tr>
<td>AUTO 114</td>
<td>Auto Ele/Ignition Sys</td>
<td>12.0</td>
</tr>
<tr>
<td>AUTO 115</td>
<td>Auto Fuel Emis Ctrl</td>
<td>12.0</td>
</tr>
<tr>
<td>TEC M 52</td>
<td>Math (Required)</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Electives (Minimum of 5 units)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 59</td>
<td>Auto Air Conditioning</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 75a</td>
<td>Intro/Eng Overhaul</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO 75b</td>
<td>Eng Repair Technique</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO 102A</td>
<td>Auto Engines</td>
<td>12.0</td>
</tr>
<tr>
<td>AUTO 59</td>
<td>Auto Air Conditioning</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 75A</td>
<td>Intro/Eng Overhaul</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO 75B</td>
<td>Eng Repair Technique</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO 102A</td>
<td>Auto Engines</td>
<td>12.0</td>
</tr>
<tr>
<td>ELE T 1</td>
<td>Survey of Electronics</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGL</td>
<td>Approved Course</td>
<td>3.0</td>
</tr>
<tr>
<td>IND T 275</td>
<td>Spec Prblms/Auto</td>
<td>1-3.0</td>
</tr>
</tbody>
</table>

### Other Suggested Courses

AUTO 62 Automat Transmiss (2), AUTO 73 Wheel Alignment (2), AUTO 74 Disc/Brake Sv (2), AUTO 103 Auto/Truck Brake (6), AUTO 108 Steer/Suspens (6), AUTO 112 Transm/Power Train (12); MCH T 1a-1b Beg Machine Shop (3); WELD 1a-1b Intro Welding Process (3).

# CABINETMAKING CERTIFICATE PROGRAM

## Minimum units required — 36

### Required Courses (Minimum of 30 units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOOD 1</td>
<td>Beg Hand Wdwrkng</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD 2</td>
<td>Beg Mch Wdwrkng</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD 55a</td>
<td>Int Cabinetmaking</td>
<td>6.0</td>
</tr>
<tr>
<td>WOOD 65ab</td>
<td>Adv Cabinetmaking</td>
<td>6.0</td>
</tr>
<tr>
<td>WOOD 65c</td>
<td>Adv Cabinetmaking</td>
<td>6.0</td>
</tr>
<tr>
<td>WOOD 30a</td>
<td>Industrial Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>IND T 30a</td>
<td>Industrial Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>CNSTR 1</td>
<td>Intro Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>TEC M 52</td>
<td>Math (Required)</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### Electives (Minimum of 6 units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN DR 30b</td>
<td>Industrial Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>IND T 274</td>
<td>Spec Prblm/Wdwrkng</td>
<td>1-3.0</td>
</tr>
<tr>
<td>IND T 249</td>
<td>Coop Wrk Exp Ed</td>
<td>4.0</td>
</tr>
<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>INT D 15a</td>
<td>Elemnts/Prin Design</td>
<td>3.0</td>
</tr>
<tr>
<td>INT D 23ab</td>
<td>Furniture Styles</td>
<td>4.0</td>
</tr>
</tbody>
</table>

### Other Suggested Courses

BUS 52 Intro to Business (3), BUS 58 Human Relat/Motivat (3), BUS 71a Leadership/Mgt Trn (1-4); English (3); MATH A Elementary Algebra (3), MATH B Geometry (3).
# COMPUTER AIDED MANUFACTURING CERTIFICATE PROGRAM

## Minimum units required — 28

### Required Courses (Minimum of 18 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCH T 1ab Beg Machine Shop</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH T 53ab Intmd Machine Shop</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH T 2 Prgm/Numcr Cntrl</td>
<td>3.0</td>
</tr>
<tr>
<td>TEC M 52 Intro Tech Math</td>
<td>3.0</td>
</tr>
<tr>
<td>MEC T 54a Blprnt Wldrs Mchnst</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### Electives (Minimum of 10 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN DR 18 Intro/CADD</td>
<td>1.0</td>
</tr>
<tr>
<td>ENGL Approved course</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 20a Cmp Asst Drft/Dsn</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH C Plane Trigonometry</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 30a Industrial Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 200C Plane Trigonometry</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH T 54ab Adv Machine Shop</td>
<td>3.0</td>
</tr>
</tbody>
</table>

# ELECTRONICS TECHNOLOGY CERTIFICATE PROGRAM

## Minimum units required — 46

### Required Courses (42 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE T 2 Fund of Electricity</td>
<td>4.0</td>
</tr>
<tr>
<td>ELE T 3 Passive Netwrk Anal</td>
<td>4.0</td>
</tr>
<tr>
<td>ELE T 9 Semicond Circ Analy</td>
<td>4.0</td>
</tr>
<tr>
<td>ELE T 12 Digital Logic</td>
<td>4.0</td>
</tr>
<tr>
<td>ELE T 60 Fd Ef/Intg Circ Anal</td>
<td>4.0</td>
</tr>
<tr>
<td>ELE T 66a Elec Commun Cirtc</td>
<td>4.0</td>
</tr>
<tr>
<td>ELE T 66b Elec Commun Sys</td>
<td>4.0</td>
</tr>
<tr>
<td>ELE T 67 Microwave Commnic</td>
<td>4.0</td>
</tr>
<tr>
<td>ELE T 68 Microprocessors</td>
<td>4.0</td>
</tr>
<tr>
<td>TEC M 53a Technical Math</td>
<td>3.0</td>
</tr>
<tr>
<td>TEC M 53b Technical Math</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### Other Suggested Courses

TEC M 53c Technical Calculus (3); TEC M 53d Technical Calculus (3); PHYSC 2ab Physics (4); COM S 7 Intro/Assembly Language (3); IND T 272 Spec Problems/Elec (1-3).

# MACHINE TOOL METALWORKING CERTIFICATE PROGRAM

## Minimum units required — 31

### Required Courses (Minimum of 25 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCH T 1ab Beg Machine Shop</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH T 53ab Intmd Machine Shop</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH T 54ab Adv Machine Shop</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH T 2 Prgrmn Numer Cntrl</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH T 3 Num Con Lthe/Mchn</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN DR 18 Intro to CADD</td>
<td>1.0</td>
</tr>
<tr>
<td>TEC M 52 Intro Techn Math</td>
<td>3.0</td>
</tr>
<tr>
<td>MEC T 54a Blprnt Wldrs Mchnst</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 1ab Intro Weldng Process</td>
<td>3.0</td>
</tr>
</tbody>
</table>
BAKERSFIELD COLLEGE

Electives (Minimum of 6 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Required Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 53ab Beg Shield Arc Wldg</td>
<td>3.0</td>
<td>IN DR 20a Comp Asst Drft/Dsgn</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL Approved course</td>
<td>3.0</td>
<td>IND T 273 Spc Prbm Drft/Dsn</td>
<td>1.0-3.0</td>
</tr>
<tr>
<td>IN DR 30a Industrial Drawing</td>
<td>3.0</td>
<td>IND T 249 Coop Work Exp Ed</td>
<td>1.0-4.0</td>
</tr>
</tbody>
</table>

PETROLEUM TECHNOLOGY CERTIFICATE

This program is a cooperative effort of Bakersfield College and Taft College/WESTEC. It is designed to provide general knowledge of the petroleum industry, to prepare students for immediate employment, and to encourage continuing education.

Bakersfield College and Taft College have an articulation agreement under which all technical coursework for the Petroleum Technology degree and certificate will be offered through Taft College and WESTEC, at both locations in both Taft and Bakersfield College. Many classes will continue to be offered on the BC campus. Students should check the TAFT and BC class schedule and the local newspaper for announcements of these classes. For further information, BC students may review the Taft College catalog on reserve in the Library, Counseling Center, or Office of Instruction.

BC students will be given full transfer credit for Taft College classes toward the BC degree or certificate, and vice versa. For more details, call Jerry Kelley at 589-0417 in Bakersfield, or 763-4282 in Taft.

Minimum units required – 26

Required Courses for All Students – 15-16 units

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Required Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH D Intermediate Algebra</td>
<td>4.0</td>
<td>PET T 81* Oilfld Regs/Leg Req</td>
<td>3.0</td>
</tr>
<tr>
<td>OR MATH 200D Intermediate Algebra</td>
<td>4.0</td>
<td>IN DR 18 Intro CADD</td>
<td>1.0</td>
</tr>
<tr>
<td>PET T 59* Oilfield Mathematics</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET T 80* Safety/Fire Prevntn</td>
<td>2.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Courses for Specialty in DRILLING – 11 units

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Required Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 10 Intro Geology</td>
<td>3.0</td>
<td>PET T 71* Intr Dril/Well Comp</td>
<td>3.0</td>
</tr>
<tr>
<td>OR PET T 52* Petro Explr/Geology</td>
<td>3.0</td>
<td>OR PET T 71L* Dril/Well Compl Lab</td>
<td>2.0</td>
</tr>
<tr>
<td>PET 60* Intr Drilling Fluids</td>
<td>3.0</td>
<td>PET T 71x* Adv Dril/Well Lab</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Suggested Courses for Specialty in WORKOVER – 11 units

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Required Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>PET T 60* Intr Drllng Fluids</td>
<td>3.0</td>
<td>PET T 75L* Well Serv/Wkvr Lab</td>
<td>2.0</td>
</tr>
<tr>
<td>PET T 73* Prod Prac/Downhole</td>
<td>3.0</td>
<td>OR PET T 75x* Adv Well Serv Lab</td>
<td>2.0</td>
</tr>
<tr>
<td>PET T 75* Well Serv/Workover</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Suggested Courses for Specialty in PRODUCTION – 11 units

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

Suggested Courses for Specialty in TECHNICAL STUDIES – 12 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 10</td>
<td>Intro Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td>Petro Explr/Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>PET T 52*</td>
<td>Corrosn Cntrl Meas</td>
<td>3.0</td>
</tr>
</tbody>
</table>

*Courses offered at Taft College/WESTEC. One unit lab courses may be substituted, with additional units made up by electives. See Engineering Technology for additional program options.

SURVEYING CERTIFICATE PROGRAM

Minimum units required – 24

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</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 68</td>
<td>Wrtng Legal Descrip</td>
<td>4.0</td>
</tr>
</tbody>
</table>

WELDING CERTIFICATE PROGRAM

Minimum units required – 36

Required Courses (Minimum of 24 units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 1ab</td>
<td>Intro Weldng Process</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 53ab</td>
<td>Beg Shield Arc Wldg</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 53cd</td>
<td>Structl Plate Cert</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 65ab</td>
<td>ASME Pipe Cepit</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 65cd</td>
<td>API/Related Certif</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 66ab</td>
<td>Welded Steel Strctrs</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 73</td>
<td>Maint/Repair Welding</td>
<td>1.5</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>ENGL</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>IND T 271</td>
<td>Spec Prblms/Wldg</td>
<td>1-3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE T 1</td>
<td>Survey of Electronics</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 78ab</td>
<td>Adv Tig/Mig Wldg</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH T 53ab</td>
<td>Intermd Mchine Shp</td>
<td>3.0</td>
</tr>
</tbody>
</table>
ASSOCIATE DEGREE PROGRAMS

Students are encouraged to continue their education beyond the Certificate of Achievement by taking additional technical and general education courses which lead to an Associate in Science or Associate in 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.

ASSOCIATE IN 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 Aviation Fundamentals</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>AERO 54 Aviation Meteorology</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>AERO 51 Instrumental Rule Fundamentals</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>AERO 52 Airspace/Traffic Control</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>AERO 53 Advanced Flight Technology</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>MATH 2 Intermediate Algebra</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>PHYS 2a Mechanics / Heat</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>PHYS 2b General Science and Math</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>SP ST 201 Specifications and Studies</td>
<td>4.0</td>
<td></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 102a Automotive Engines</td>
<td>12.0</td>
<td>UN</td>
</tr>
<tr>
<td>AUTO 103 Auto/Truck/Brake</td>
<td>6.0</td>
<td></td>
</tr>
<tr>
<td>AUTO 108 Auto Steer/Suspension</td>
<td>6.0</td>
<td></td>
</tr>
<tr>
<td>AUTO 112 Transmission/Power Train</td>
<td>12.0</td>
<td></td>
</tr>
<tr>
<td>AUTO 114 Auto Ele/Ignition Systems</td>
<td>12.0</td>
<td></td>
</tr>
<tr>
<td>AUTO 115 Fuel Emissions Control</td>
<td>12.0</td>
<td></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>TEC M 53a Technical Math</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ELE T 2 Fund of Electricity</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>ELE T 3 Passive Network Analysis</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>ELE T 9 Semiconductor Circuits</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>TEC M 53b Technical Math</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ELE T 55 Electro Mechanical Devices</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>ELE T 56 Microprocessors</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>ELE T 67 Microwave Communication</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>ELE T 68 Microprocessors</td>
<td>4.0</td>
<td></td>
</tr>
</tbody>
</table>

Other Suggested Courses

TEC M 53c Technical Calculus (3), TEC M 53d Technical Calculus (3).
MACHINE TOOL TECHNOLOGY
(Formerly Machine Tool Metalworking)

Minimum units required in discipline — 31

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCH T 1ab</td>
<td>Beg Machine Shop</td>
<td>3.0</td>
<td>TEC M 52</td>
<td>Intro Tech Math</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH T 2</td>
<td>Prgrmn Numer Cntrl</td>
<td>3.0</td>
<td>WELD 1ab</td>
<td>Intro Weldng Process</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH T 3</td>
<td>Num Con Lth/Mchn</td>
<td>3.0</td>
<td>IN DR 18</td>
<td>Intro CADD</td>
<td>1.0</td>
</tr>
<tr>
<td>MCH T 53ab</td>
<td>Intermd Mchns Shop</td>
<td>3.0</td>
<td>IN DR 20a</td>
<td>Cmp Asst Drft/Dsn</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH T 54ab</td>
<td>Adv Machine Shop</td>
<td>3.0</td>
<td>IN DR 30a</td>
<td>Industrial Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>MEC T 54a</td>
<td>Blprnt Wldrs Mchnst</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 support transfer options and engineering technology programs. Students may complete courses at either college and elect their degree or certificate from either college.

Many classes will continue to be offered on the BC campus. Students should check the Taft and BC class schedule and the local newspaper for announcements of classes. For further information BC students may review the Taft College catalog on reserve in the Library, Counseling Center, or Office of Instruction.

BC students will be given full transfer credit for Taft College classes toward the BC degree or certificate, and vice versa. For more details, call Jerry Kelley at 589-0417 in Bakersfield, or 763-4282 in Taft.

General Requirements (one Course from each of the following groups — 18-20 units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1</td>
<td>Intro Composition</td>
<td>3-4</td>
</tr>
<tr>
<td>ENGL 1a</td>
<td>Expository Compositn</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1a</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 2a</td>
<td>Intro Gen Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 2a</td>
<td>Gen Mech/Heat</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 11a</td>
<td>College Physics</td>
<td>4</td>
</tr>
<tr>
<td>MATH D OR</td>
<td>Intermediate Algebra</td>
<td>4</td>
</tr>
</tbody>
</table>
## COMPUTER SCIENCE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM S 5</td>
<td>Intro Prog w/BASIC</td>
<td>3</td>
</tr>
<tr>
<td>COM S 10</td>
<td>Intro Prg w/PASCAL</td>
<td>3</td>
</tr>
<tr>
<td>DTA P 1</td>
<td>Intro Data Processing</td>
<td>3</td>
</tr>
</tbody>
</table>

### Major Requirements 24-27 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 10</td>
<td>Intro Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 52</td>
<td>Petro Explr/Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>PET T 65*</td>
<td>Fndmntls Petr Indstry</td>
<td>3.0</td>
</tr>
<tr>
<td>PET T 54*</td>
<td>Petro Prod Prac</td>
<td>3.0</td>
</tr>
<tr>
<td>PET T 54L*</td>
<td>Petro Prod Prac Lab1-2.0</td>
<td></td>
</tr>
<tr>
<td>PET T 71*</td>
<td>Intr Dril/Well Comp</td>
<td>3.0</td>
</tr>
<tr>
<td>PET T 71L*</td>
<td>Dril/Well Compl Lab</td>
<td>2.0</td>
</tr>
<tr>
<td>PET T 75*</td>
<td>Well Serv/Workover</td>
<td>3.0</td>
</tr>
<tr>
<td>PET T 75L*</td>
<td>Well Srv/Wkvr</td>
<td>1-2.0</td>
</tr>
<tr>
<td>PET T 80*</td>
<td>Safety/Fire Prevntn</td>
<td>2.0</td>
</tr>
<tr>
<td>PET T 81*</td>
<td>Oilfd Regs/Leg Req</td>
<td>3.0</td>
</tr>
<tr>
<td>PET T 80</td>
<td>Safety / Fire Prevention</td>
<td>2.0</td>
</tr>
<tr>
<td>PET T 81</td>
<td>Oilfield Regulations / Legal Requirements</td>
<td>3.0</td>
</tr>
<tr>
<td>PET T 82</td>
<td>Fire Prevention</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Approved electives may be substituted for major requirements when major courses cannot be completed due to college schedule cutbacks. Students should confer with the appropriate Dean or WESTEC Director for approval of substitutes.

### Electives

Elective courses, 3-6 units, may be chosen for a total of 30 units within the major field of study. The student wishing to specialize in some aspect of the program (Drilling, Production, Servicing, Engineering Technology) may petition for substitution of electives for certain major requirements.

Electives may include:

- PET T 249 Cooperative Work Exp Ed (1-4 units) and any Petroleum Technology course not listed as a major requirement, or courses in report writing, computing, data processing, or draft/design (CADD), or courses beyond the general education requirements of the college in mathematics and sciences.

**NOTE:** Technical report writing will be included as a completion requirement in each of the Petroleum Technology laboratory courses.

*Courses offered at Taft College/WESTEC. One unit lab courses may be substituted, with additional units made up by electives. See Engineering Technology for additional program options.
WELDING TECHNOLOGY

Minimum units required in discipline – 30.5

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 1ab Intro Welding Process</td>
<td>3.0</td>
<td>WELD 79 Welding Inspection</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD 53ab Beg Shield Arc Wld</td>
<td>3.0</td>
<td>MEC T 54a Blprnt Wldrs Mchnst</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 53cd Strelt Plate Certifictn</td>
<td>3.0</td>
<td>MCH T 1ab Beg Machine Shop</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 65ab ASME Pipe Certifictn</td>
<td>3.0</td>
<td>MCH T 53ab Int Machine Shop</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 66ab Welded Steel Structr</td>
<td>3.0</td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>WELD 73 Maint/Repair Weldng</td>
<td>1.5</td>
<td>IND T 271 Spec Prbm/Wldg</td>
<td>1-3.0</td>
</tr>
<tr>
<td>WELD 74ab Intr Tig/Mig Weldng</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

WOODWORKING TECHNOLOGY

Minimum units required in discipline – 36

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOOD 1 Beg Hand Woodwrkn</td>
<td>3.0</td>
<td>IN DR 30a Industrial Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD 2 Beg Mchn Wdwrkng</td>
<td>3.0</td>
<td>IN DR 30b Industrial Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD 55ab Int Cabinetmaking</td>
<td>3.0</td>
<td>INT D 15a Elemnts/Princ Dsgn</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD 65ab Adv Cabinetmaking</td>
<td>3.0</td>
<td>MCH T 1ab Beg Machine Shop</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD 65cd Adv Cabinetmaking</td>
<td>3.0</td>
<td>FORES 2 Natural Resources</td>
<td>3.0</td>
</tr>
<tr>
<td>FORES 1 Intro to Forestry</td>
<td>3.0</td>
<td>TEC M 52 Intro Tech Math</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 technical level.

Cal Poly, San Luis Obispo; Fresno State and Sacramento State Universities

Required Courses in Major

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE T 2</td>
<td>Fund of Electricity</td>
<td>4.0</td>
</tr>
<tr>
<td>ELE T 3</td>
<td>Passive Netwrk Anal</td>
<td>4.0</td>
</tr>
<tr>
<td>ELE T 9</td>
<td>Semicond Circ Anal</td>
<td>4.0</td>
</tr>
<tr>
<td>ELE T 55</td>
<td>Electro Mech Dvices</td>
<td>4.0</td>
</tr>
<tr>
<td>ELE T 66a</td>
<td>Electro Commnic Crt</td>
<td>4.0</td>
</tr>
<tr>
<td>ELE T 66b</td>
<td>Electro Commnic Sys</td>
<td>4.0</td>
</tr>
<tr>
<td>ELE T 67</td>
<td>Microwave Commnic</td>
<td>3.0</td>
</tr>
<tr>
<td>TEC M 53a</td>
<td>Technical Math</td>
<td>3.0</td>
</tr>
<tr>
<td>TEC M 53b</td>
<td>Technical Math</td>
<td>3.0</td>
</tr>
<tr>
<td>TEC M 53cd</td>
<td>Technical Calculus</td>
<td>6.0</td>
</tr>
<tr>
<td>PHYSC 2ab</td>
<td>Physics</td>
<td>8.0</td>
</tr>
</tbody>
</table>

INDUSTRIAL TECHNOLOGY

Designed for students who wish to work toward the Bachelor of Arts or the Bachelor of Science degree in Industrial Arts or Industrial Technology as offered by many state universities. Graduates find employment in a broad range of professional positions in industrial management, safety, manufacturing, construction and marketing.

California State University

Required Courses in Major

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</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>Survey of Electronics</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD 1</td>
<td>Beg Hand Wdwrkng</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD 2</td>
<td>Beg Mchne Wdwrkng</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 30a</td>
<td>Industrial Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>MCH T 1ab</td>
<td>Beg Machine Shop</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 1ab</td>
<td>Intro Weldng Process</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, System. Refer to the California State University System catalog and consult with your counselor for specific requirements.

APPRENTICESHIP PROGRAMS

Apprenticeship courses are designed for indentured apprentices 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 during each year of 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 assure 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 apprenticeship programs may be obtained from the college coordinator of apprenticeship training. Interested persons are encouraged to apply for any of these programs through the specific trade union.

- Brick/Tile Layers
- Carpentry
- Electricians
- Floorcovering
- Inside Wireman/Electricity
- Operating Engineers

- Painting/Decorating/Papering
- Plasterers/Cement Masons
- Plumbing/Pipefitting
- Sheet Metal

**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 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

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; Repeat repeatability; **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. **NOTE:** If repeatability is not shown, course may not be repeated.

AERONAUTICS

AERO 2 AVIATION FUNDAMENTALS (3 units)
Principles of aerodynamics and flight, radio communications, aircraft engines and systems and aircraft performance characteristics including federal aviation regulations and air navigation. Students who satisfactorily complete the course will be eligible to take the Federal Aviation Administration Private Pilot Airplane written test. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

AERO 51 INSTRUMENT FLIGHT RULES AND FUNDAMENTALS (3 units)
Federal aviation regulations, air navigation, principles of aerodynamics and flight, radio communications, instrument charts, instruments and instrument systems. Prepares the student to pass the Federal Aviation Administration Instrument Rating Airplane Written Test. **Prerequisite:** AERO 2 or Private Pilot Certificate. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly AERO 4.

AERO 52 AIRSPACE AND AIR TRAFFIC CONTROL (3 units)
Airspace and air traffic control including other airspaces used by air traffic control, uncontrolled airspace, special use airspace and airspace used by other agencies. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly AERO 7.

AERO 53 ADVANCED FLIGHT TECHNOLOGY (3 units)
Federal Aviation regulations, aerodynamics and principles of flight, aircraft performance and airspace procedures. Prepares the student to pass the Federal Aviation Administration Commercial Pilot Written test. **Prerequisite:** AERO 2 or Private Pilot Certificate. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly AERO 8.

AERO 54 AVIATION METEOROLOGY (3 units)
Aviation Meteorology including a basic study of the properties of the atmosphere, circulation patterns, stability, turbulence, icing, thunderstorms, airmasses, fronts, restrictions to visibility, reading and interpretation of aviation weather reports, forecasts and charts. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly AERO 3.
AIR CONDITIONING and REFRIGERATION

AC RF 54a – 54b  AIR CONDITIONING AND REFRIGERATION (3 – 3 units)
Principles of refrigeration and air conditioning applied to domestic and commercial systems. Repair and maintenance of major systems components and controls. Prerequisite: TEC M 52 or equivalent (may be taken concurrently); ELE T 1 or ELE T 54a or equivalent, or evaluation by instructor. AC RF 54a is prerequisite for ACRF 54b. Hours: (126-126) 1 lect, 6 lab. Repeat: 1. CCS: Occupational Education. Not Transferable: Associate Degree only.

AUTO

AUTO 1  BASIC AUTO (4 units)
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. Component function diagnosis and repair of defective components and systems. Prerequisite: Reading Level 1. Hours: (108) 3 lect, 3 lab. CCS: Occupational Education. Transferable: CSU and Private Colleges.

AUTO 56a – 56b  AUTOMOTIVE BODY – COLLISION REPAIR (3 – 3 units)
Safe usage of auto body repair tools, analysis of collision damage, estimating repair costs, repairing and replacement of damaged components. Prerequisite: Reading Level 1 or evaluation by instructor. WELD 1a—1b may be taken concurrently. Hours: (126-126) 1 lect, 6 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

AUTO 56c – 56d  AUTO BODY – REFINISHING (3 – 3 units)
Safe usage of auto tools and equipment, body surface final preparation, modern finish materials, finish application tools and methods, hard and soft trim repair and replacement. Prerequisites: Reading Level 1 or evaluation by instructor. AUTO 56ab, WELD 1a—1b may be taken concurrently. Hours: (126-126) 1 lect, 6 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

AUTO 59  AUTOMOTIVE AIR CONDITIONING (2 units)
Safety, principles and theory of automotive air conditioning systems, laboratory practice in the installation, service and repair of automotive air conditioning components. Prerequisite: Reading Level 1. Hours: (54) 2 lect, 1 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

AUTO 62  AUTOMATIC TRANSMISSIONS (2 units)
Entry-level program providing technical instruction in diagnosis and repairs of automatic transmissions. Prerequisite: Reading Level 1. Hours: (54) 1½ lect, 1½ lab. CCS: Occupational Education. Not Transferable: Associate Degree only.
AUTO 63a AUTOMOTIVE FUEL AND CARBURETION SYSTEMS (2 units)
Techniques and procedures for overhaul and service of fuel and carburetor systems in­cluding fuel tank, lines, pump, carburetor and Ford v8 carburetors. Fuel injection ser­vice is also covered. Prerequisite: AUTO 1 or one year automotive experience; Reading Level 1. Hours: (54) 1½ lect, 1½ lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

AUTO 64a AUTOMOTIVE ELECTRICITY (2 units)
Fundamentals of automotive electrical components including batteries, alternators, starters. Laboratory emphasis on testing and servicing of electrical equipment. Prereq­uisite: Reading Level 1. Hours: (54) 1½ lect, 1½ lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

AUTO 65 AUTOMOTIVE EMISSION CONTROL DEVICES (2 units)
Installation, operation, and repair of automotive pollution control devices including crankcase devices, exhaust emissions, and vapor control systems. Meets the California Air Resources Board (C.A.R.B.) pre-examination requirements. Prerequisite: AUTO 1 or one year automotive trade experience, or evaluation by instructor. Reading Level 1. Hours: (81) 2 lect, 2½ lab. Repeat: 1. CCS: Occupational Education. Not Transferable: Associate Degree only.

AUTO 66 AUTOMOTIVE COMPUTER SYSTEMS (4 units)
Operation and diagnosis of domestic computerized engine control systems. Includes electronic devices, control modules, sensors, and computerized fuel systems. Laboratory includes electronic diagnosis, computer code analysis, and fuel system diagnosis. Prerequisite: Two years automotive trade experience/or AUTO 64a or examination by instructor. Reading Level 1. Hours: (108) 3 lect, 3 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

AUTO 73 WHEEL ALIGNMENT (2 units)
Principles of front end and four wheel alignment including repair, replacement and ad­justment of suspension components. Instruction and use of computerized 4-wheel alignment machine. Prerequisite: Reading Level 1. Hours: (54) 1½ lect, 1½ lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

AUTO 74 AUTOMOTIVE DISC AND DRUM BRAKE SERVICE (2 units)
Principles of operation and diagnosis, repair, and replacement of automotive brake system components. Prerequisite: Reading Level 1. Hours: (54) 1½ lect, 1½ lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

AUTO 75a INTRODUCTION TO ENGINE OVERHAUL (3 units)
Theory of internal combustion, piston-type engine design and maintenance. Engine disassembly for familiarization purposes. Prerequisite: AUTO 1 or evaluation by in­structor. Hours: (108) 2 lect, 4 lab. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Formerly AUTO 75.
AUTO 75b ENGINE REPAIR TECHNIQUES (3 units)
Theory of internal combustion, piston-type engine repair techniques. Practice in overhaul procedures, mechanical problem diagnosis and measuring techniques. **Prerequisite:** AUTO 75a. **Hours:** (108) 2 lect, 4 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly Part of AUTO 75.

AUTO 75c ADVANCED ENGINE OVERHAUL (3 units)
Application of engine overhaul theory and procedures, component tolerancing, reassembly and break-in procedures. **Prerequisite:** AUTO 75b. **Hours:** (108) 2 lect, 4 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly AUTO 75.

AUTO 75d ADVANCED ENGINE MACHINING (3 units)
Advanced engine design, theory of machining techniques and engine machining procedures. Practice in automotive machining. **Prerequisite:** AUTO 75c. **Hours:** (108) 2 lect, 4 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly part of AUTO 75.

AUTO 90 AUTOMOTIVE MAINTENANCE AND REPAIR (3–12 units)
Engine components, chassis, brake, air conditioning service and basic engine tune-up. **Prerequisites:** Minimum of Reading Level 1, or evaluation by program coordinator. Concurrent enrollment in the Bakersfield College Employer’s Training Resource Program (ETR); concurrent enrollment in IND E 90. **Hours:** (113-452) 5 lect, 20 lab. Open entry/open exit. **Repeat:** 1, or until a limit of 12 units is reached. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

AUTO 102a AUTOMOTIVE ENGINES (12 units)
Theory of internal combustion, piston-type engine design and maintenance. Practice in engine overhaul procedures and mechanical problem diagnosis. **Prerequisite:** Reading Level 1. **Hours:** (360) 8 lect, 12 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

AUTO 102b AUTOMOTIVE ENGINES MACHINING (12 units)
Advanced engine design, theory of machining techniques and engine machining procedures. Practice in automotive machining operations. **Prerequisite:** AUTO 102a. **Hours:** (360) 8 lect, 12 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

AUTO 103 BRAKE SYSTEMS—AUTOMOBILES AND TRUCKS (6 units)
Principles and service procedures for components of automotive and light truck brake system. **Prerequisite:** Reading Level 1. **Hours:** (180) 8 lect, 12 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
AUTO 108 AUTOMOTIVE SUSPENSION, STEERING AND ALIGNMENT (6 units)
Principles of design and operation, techniques for repair and replacement of 4-wheel suspension components. Alignment procedures using modern computerized 4-wheel alignment equipment. **Prerequisite:** Reading Level 1. **Hours:** (180) 8 lect, 12 lab for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

AUTO 112 AUTOMOTIVE TRANSMISSIONS AND POWER TRAINS SERVICE (12 units)
Automatic transmissions and transaxles, standard transmissions and transaxles, clutches, “U” joints, differentials and all related components to the extent which should enable the student to pass the National Institute of Service Excellence test. **Prerequisite:** Reading Level 1. **Hours:** (360) 8 lect, 12 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

AUTO 114 AUTOMOTIVE ELECTRICAL, ELECTRONICS, AND IGNITION SYSTEMS (12 units)
Fundamentals of automotive electrical/electronic component repair. Includes electrical theory, diagnosis and repair of charging and ignition systems including computer controlled systems. Laboratory emphasis on computer diagnostic equipment. Field trip required. **Prerequisite:** Reading Level 1; AUTO 1 with a grade of “B” or examination by instructor. **Hours:** (360) 8 lect/demonstration, 12 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

AUTO 115 AUTOMOTIVE FUEL SYSTEMS, EMISSIONS AND COMPUTER CONTROLS (12 units)
Theory, operation, and servicing of automotive fuel systems, computer controlled fuel systems, and emission controls. Advanced engine performance will also be included along with the California Air Resources Board (C.A.R.B.) smog program. Laboratory includes using diagnostic equipment for computer controlled automobile servicing. **Prerequisites:** Reading Level 1; AUTO 114 or AUTO 1 with a grade of “B,” or 1 year high school auto with a grade of “B,” or evaluation by instructor. **Hours:** (360) 8 lect/demonstration, 12 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CONSTRUCTION TECHNOLOGY

CNSTR 1 INTRODUCTION TO CONSTRUCTION (3 units)
Basic concepts of the construction industry. Overview of careers in construction, planning and layout, foundations and concrete, and light frame construction. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (54) 3 lect. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
**INDUSTRIAL TECHNOLOGY**

CNSTR 2ab  **BLUEPRINT READING AND ESTIMATING (1.5—1.5 units)**  
Blueprint reading and estimating for the building trades. Techniques in blueprint reading related to floorplans, elevations, plot plans, special details, symbols and notations are emphasized. Estimating related concrete, framing, roofing, window electrical plumbing, heating and air conditioning. **Prerequisite:** Reading Level 1, CNSTR 1 or evaluation by instructor. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly CNSTR 2.

**ELECTRICAL TECHNOLOGY**

ELE T 1  **SURVEY OF ELECTRONICS (4 units)**  
Fundamental concepts of DC and AC circuits, magnetic principles, sources of power, measuring instruments, and electrical machines. **Prerequisite:** Reading Level 1. **Hours:** (108) 3 lect, 3 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

ELE T 2  **FUNDAMENTALS OF ELECTRICITY (4 units)**  
Analysis of direct current and alternating current electric circuits containing resistors, capacitors and inductors. Measurement of electrical quantities using the voltmeter impedance bridge and oscilloscope. **Prerequisites:** Concurrent enrollment in TEC M 53a. Reading Level 1. **Hours:** (108) 3 lect, 3 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges. **Note:** Formerly ELE T 54a.

ELE T 3  **PASSIVE NETWORK ANALYSIS (4 units)**  
Analysis of electric network containing direct current, alternating current, resistors, capacitors and inductors. Measurement of electrical quantities and their phase angle. **Prerequisites:** ELE T 2 with a grade of "C," concurrent enrollment in TEC M 53b. **Hours:** (108) 3 lect, 3 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges. **Note:** Formerly ELE TC 54b.

ELE T 9  **SEMICONDUCTOR CIRCUIT ANALYSIS (4 units)**  
Basic principles of analysis and design of Diode and Biopolar Semiconductor circuits. **Prerequisites:** ELE T 2 and ELE T 3; TEC M 53a—53b, all with a grade of "C", or an equivalent background in electronics. ELE T 3 and TEC M 53b may be taken concurrently. **Hours:** (108) 3 lect, 3 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges. **Note:** Formerly ELE T 59a.

ELE T 12  **DIGITAL LOGIC (4 units)**  
Principles of digital logic and computer circuits. Laboratory utilizes Transistor-Transistor Logic and Complimentary Metal-Oxide Semiconductor integrated circuits. **Prerequisite:** ELE T 9 with a grade of "C." **Hours:** (108) 3 lect, 3 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges. **Note:** Formerly ELE T 59b.

ELE T 55  **ELECTRICAL MACHINES AND ELECTRO-MECHANICAL DEVICES (4 units)**  
Basic principles of design and construction, operation characteristics, efficiency and application of direct and alternating current machines, and electro-mechanical control
devices. **Prerequisites:** ELE T 54a, 54b, TEC M 53a and 53b, all with a grade of "C." **Hours:** (108) 3 lect, 3 lab. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ELE T 60 FIELD EFFECT & INTEGRATED CIRCUIT ANALYSIS (4 units)**
Basic principles of analysis and design of field effect transistor circuits and linear integrated circuits. **Prerequisite:** TEC M 53b and ELE T 59 with a grade of "C," or equivalent background in electronics. **Hours:** (108) 3 lect, 3 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ELE T 66a ELECTRONIC COMMUNICATIONS CIRCUIT (4 units)**
Basic principles of circuits used in electronic communications equipment, including power supplies, oscillators, AF amplifiers, RF amplifiers, transmitters and modulation. **Prerequisites:** ELE T 9 with a grade of "C." **Hours:** (108) 3 lect, 3 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ELE T 66b ELECTRONIC COMMUNICATIONS SYSTEMS (4 units)**
Basic principles of electronic systems used in modern communication, AM receivers, FM receivers, television, antennas, broadcast stations and maritime radio. **Prerequisite:** ELE T 9 with a grade of "C." **Hours:** (108) 3 lect, 3 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ELE T 67 MICROWAVE COMMUNICATIONS (4 units)**
Fundamental concepts and phenomena of electrostatic and magnetic fields, coaxial transmission lines, waveguides, frequency measurement devices, active microwave devices, attenuation and power measurements **Prerequisite:** ELE T 66a with a grade of "C." **Hours:** (108) 3 lect, 3 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ELE T 68 MICROPROCESSORS (4 units)**
Analysis and study of a microprocessor as a single task controller, including machine language and assembly language. (Application of a variety of peripheral support components are interfaced to individual microprocessor trainers.) **Prerequisite:** ELE T 12 with a grade of "C." **Hours:** (108) 3 lect, 3 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**MATHEMATICS FOR ELECTRONICS**

**TEC M 52 INTRODUCTION TO TECHNICAL MATHEMATICS (3 units)**
Mathematics intended primarily for technology majors covering arithmetic processes, ratio, proportion, elementary algebra, geometric forms and construction, and elementary trigonometry. **Prerequisite:** None. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly MATH 54.

**TEC M 53a TECHNICAL MATH (3 units)**
Basic mathematics for electronic technicians. Use of the scientific electronic calculator, basic rules of algebra, solution of equations, special products and factoring, exponents and radicals, fractional equations, and introduction to trigonometry. **Prerequisite:** One year of
high school algebra or MATH A, or equivalent. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly ELE M 53a.

**TEC M 53b TECHNICAL MATH (3 units)**
Directed to electronics majors. Includes trigonometry, periodic functions, logarithms and number systems for computers. **Prerequisite:** TEC M 53a with a grade of “C,” or equivalent course. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly ELE M 53b.

**TEC M 53c TECHNICAL CALCULUS (3 units)**
Fundamental concepts of calculus, including derivatives and their applications, differentials, definite and indefinite integrals. **Prerequisites:** TEC M 53a and TEC M 53b, MATH C and MATH 1, or an equivalent background in mathematics. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly ELE M 53c.

**TEC M 53d TECHNICAL CALCULUS (3 units)**
Fundamental concepts of calculus, differentiation and integration of trigonometric, logarithmic, and exponential functions and infinite series. **Prerequisite:** TEC M 53c or an equivalent background in mathematics. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly ELE M 53d.

**INDUSTRIAL TECHNOLOGY**

**IND T 90 OCCUPATIONAL READINESS (3–10 units)**
Survival skills necessary for students to be successful in their occupational area. Units on communication, computation and technical skills emphasize the use of these skills in job related situations. Job survival skills include procedures and processes of securing a job, maintaining a job and work ethics. **Prerequisites:** Reading Level 1 or evaluation by instructor. Concurrent enrollment in either WELD 90 or AUTO 90. **Hours:** (54-180) 10 lect. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**IND T 249 COOPERATIVE WORK EXPERIENCE EDUCATION (1–4 units)**
College credit for learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college and student. **Prerequisites:** (a) Declared vocational major, (b) concurrent enrollment in seven or more units (including CWEE units, except summer school), (c) minimum 2.00 GPA, or evaluation by instructor. **Hours:** (75 hours per semester per credit unit at a paid job, or 60 hours per semester per credit unit at a non-paid job) 5 or more hours per week. **Repeat:** 3 or until a maximum of 16 units is reached. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges. Credit limitations. For specific information see counselor. **Note:** Formerly W EXP 49.
IND T 271  SPECIAL PROBLEMS IN WELDING (1–3 units. Limit 3 units)
Provides individual students the opportunity to explore various segments of welding such as various welding processes and codes, fabrication techniques, layout, and testing and preparation for certification. Development and implementation of meaningful, self-directed studies in areas where student desires specific technical and related skill development necessary for enrichment or employment. **Prerequisites:** Reading Level 1 or evaluation by instructor. WELD 1a or WELD 53a with a grade of “C,” or equivalent experience. Completed “Petition for Individual Study” form. Enrollment is contingent upon available lab space. (18-54) Hrs. by arrangement. **Repeat:** 2 or until a maximum of 3 units is reached. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

IND T 272  SPECIAL PROBLEMS IN ELECTRONICS (1–3 units. Limit 3 units)
Provides individual students the opportunity to explore various segments of electronics. Development and implementation of meaningful, self-directed studies in areas where the student desires specific technical and related skill development necessary for enrichment or employment. **Prerequisites:** Reading Level 1 or evaluation by instructor. Completion of minimum of 9 units of electronics courses with a grade of “C,” or equivalent experience. Completed “Petition for Individual Study” form. Enrollment is contingent on available lab space. **Hours:** (18-54) Hrs. by arrangement. **Repeat:** 2 or until a limit of 3 units is reached. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

IND T 273  SPECIAL PROBLEMS IN MACHINE TOOL METAL WORKING (1–3 units. Limit 3 units)
Provides individual students the opportunity to explore various segments of machine tool metal working. Development and implementation of meaningful, self-directed studies in areas where the student desires specific technical and related skill development necessary for enrichment or employment. **Prerequisites:** Reading Level 1 or evaluation by instructor. Completion of minimum of 6 units of machine tool courses with a grade of “C,” or equivalent experience. Completed “Petition for Individual Study” form. Enrollment is contingent on available lab space. **Hours:** (18-54) Hrs. by arrangement. **Repeat:** 2 or until a limit of 3 units is reached. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

IND T 274  SPECIAL PROBLEMS IN WOOD WORKING (1–3 units. Limit 3 units)
Provides the individual students the opportunity to explore various segments of woodworking. Development and implementation of meaningful, self-directed studies in areas where the student desires specific technical and related skill development necessary for enrichment or employment. **Prerequisites:** Reading Level 1 or evaluation by instructor. Completion of minimum of 9 units of woodworking courses with a grade of “C” or equivalent experience. Completed “Petition for Individual Study” form. Enrollment is contingent on available lab space. **Hours:** (18-54) Hrs. by arrangement. **Repeat:** 2 or until a limit of 3 units is reached. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.
IND T 275 SPECIAL PROBLEMS IN AUTOMOTIVES (1–3 units. Limit 3 units)
Provides the individual student the opportunity to explore various segments of automotives. Development and implementation of meaningful, self-directed studies in areas where the student desires specific technical and related skill development necessary for enrichment or employment. 

Prerequisites:
Reading Level 1 or evaluation by instructor. Completion of minimum of 12 units of automotive courses with a grade of “C” or equivalent experience. Completed “Petition for Individual Study” form. Enrollment is contingent on available lab space. 

Hours: (18-54) Hrs. by arrangement. 
Repeat: 2 or until a limit of 3 units is reached. 
CCS: Occupational Education. 
Not Transferable: Not degree applicable.

MACHINE TOOL TECHNOLOGY

MCH T 1a BEGINNING MACHINE SHOP A (1.5 units)
Basic machine tool technology, including the use of precision measuring instruments, drilling machines, and lathes. 

Prerequisite: Reading Level 1 or evaluation by instructor. 

Hours: (54) 1 lect/demo; 2 lab. 
CCS: Occupational Education. 
Transferable: CSU and Private Colleges. 
Note: Formerly MCH S 1, MCH S 52a, MCH S 52b.

MCH T 1b BEGINNING MACHINE SHOP B (1.5 units)
Basic machine tool technology emphasizing the use of lathes and vertical milling machines. 

Prerequisite: MCH T 1a or evaluation by instructor. 

Hours: (54) 1 lect; 2 lab. 
CCS: Occupational Education. 
Transferable: CSU and Private Colleges. 
Note: Formerly MCH S 1, MCH S 52a, MCH S 52b.

MCH T 2 INTRODUCTION TO NUMERICAL CONTROL AND FUNDAMENTALS OF PROGRAMMING (3 units)
Principles of numerical control, mathematical calculations used for lathe and milling machines, and fundamentals of programming on a three axis numerically controlled milling machine. 

Prerequisites: Reading Level 1 or evaluation by instructor. 
Machine shop experience, successful completion of 3 units of MCH T or concurrent enrollment in MCH T 1a or MCH T 53a. 

Hours: (54) 3 lect. Field trips may be required. 
CCS: Occupational Education. 
Not Transferable: Associate Degree only. 
Note: Formerly MCH S 2.

MCH T 3 COMPUTER NUMERICAL CONTROL LATHE OPERATION AND PROGRAMMING (3 units)
Set-up and operation of a CNC lathe including manual data input, punch, turret positioning and tool changing operation. CNC lathe programming by both manual calculation and computer software programs interfaced with computer aided design and drafting (CADD). 

Prerequisite: MCH T 2 with a grade of “C.” 

Hours: (72) 3 lect, 1 lab by arrangement. 
Repeat: 1. 
CCS: Occupational Education. 
Not Transferable: Associate Degree only. 
Note: Formerly MCH S 3.
MCH T 53a—53b  INTERMEDIATE MACHINE SHOP (1.5—1.5 units)
Operation of the lathe, milling machine, drill press, surface grinder, cylindrical grinder
and a basic introduction to numerical control. In addition, pattern making and foundry
practices will be briefly studied. Prerequisite: MCH T 1a—1b or evaluation by in-
tstructor. Hours: (54-54) 1 lect, 2 lab. Field trips may be required. CCS: Occupa-
tional Education. Not Transferable: Associate Degree only. Note: Formerly MCH S
53b, MCH S 52c, MCH S 52d.

MCH T 54a—54b  ADVANCED MACHINE SHOP (1.5—1.5 units)
Advanced lathe operations, the radial drilling machine, cutting fluids, and cutting tool
materials, including a brief study of advanced machining processes, and the design
and construction of jigs and fixtures. Prerequisite: MCH T 53a—53b, or evaluation
by instructor. Hours: (54-54) 1 lect, 2 lab. Field trips may be required. CCS: Oc-
cupational Education. Not Transferable: Associate Degree only. Note: Formerly
MCH S 53c, MCH S 53d.

MECHANICAL TECHNOLOGY

MEC T 54a  BLUEPRINT READING
FOR WELDERS AND MACHINISTS (3 units)
Principles of blueprint reading as applied to the welding and machine trades. Em-
phasizes the ability to visualize and interpret working drawings. Welding symbols and
basic shop math are also included. Prerequisite: Reading Level 1 or evaluation by in-
tstructor. Hours: (54) 3 lect. CCS: Occupational Education. Not Transferable:
Associate Degree only.

MEC T 54b  TEMPLATE DEVELOPMENT
AND LAYOUT FOR THE WELDER (3 units)
Technical skills and critical thinking in layout techniques including layout situations,
mathematical and pipe fitting terminology used in the industry. Prerequisites:
Reading Level 1 or evaluation by instructor. MEC T 54a with a grade of “C,” or
equivalent experience. Hours: (54) 3 lect. CCS: Occupational Education. Not
Transferable: Associate Degree only.

PETROLEUM TECHNOLOGY

PET T 249  COOPERATIVE WORK EXPERIENCE EDUCATION (1—4 units)
College credit for learning experiences obtained on the job in accordance with a train-
ing plan developed cooperatively between the employer, college, and student. Pre-
requisites: (a) Declared vocational major, (b) concurrent enrollment in seven or
more units (including CWEE units, except summer school), (c) minimum 2.00 GPA,
or evaluation by instructor. Hours: (75 hours per semester per credit unit at a paid
job, or 60 hours per semester per credit unit at a non-paid job). 5 or more hours per
week. Repeat: 3, not to exceed a maximum of 16 units. CCS: Occupational Educa-
tion. Not Transferable: Associate Degree only. Credit limitations. For specific infor-
mation see counselor. Note: Formerly W EXP 49.
SURVEYING

SURV 61 SURVEYING MATHEMATICS (3 units)
Application of trigonometric functions and the solution of triangles to surveying. Surveying problems applied to line direction, coordinates, circular curves and calculations. Prerequisites: High school algebra and geometry, or equivalent. Hours: (54) 3 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

SURV 62 SURVEYING PRACTICES (3 units)
Primary skills required to become a beginning surveyor, including methods of communication through use of sights and signals, collecting and recording data in field books, measurements and running levels. Prerequisite: SURV 61 or evaluation by instructor. Reading Level 1. Hours: (54) 3 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

SURV 63 TRAVERSE SURVEYING (3 units)
Classroom experience in planning a traverse survey, computing positions from field data, and making mathematical adjustments to field data to determine final position. Prerequisites: SURV 61 or equivalent. Reading Level 1. Hours: (54) 3 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

SURV 65 TOPOGRAPHIC SURVEYING (3 units)
Skills in preparing topographic maps using principle of stadia measurements, sources of information, scope of work, and field and office procedures for architectural, hydrographic and photogrammetric surveys. Prerequisite: SURV 61 or evaluation by instructor. Reading Level 1. Hours: (54) 3 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

SURV 66 CONTROL SURVEYING (3 units)
Solar observation and star shot for determining True North. Construction surveys and property surveys for layout of construction projects and setting property corners, laws governing surveyors. Prerequisite: SURV 61 or evaluation by instructor. Reading Level 1. Hours: (54) 3 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

SURV 67 LAND SURVEYING (3 units)
Background to the origin of the US Public Land Surveys. Solving problems in triangulation and trilateration and relates the solution of these problems to the California State Plane Coordinate System. Prerequisite: SURV 61 or evaluation by instructor. Reading Level 1. Hours: (54) 3 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

SURV 68 WRITING LEGAL SURVEYING DESCRIPTIONS (3 units)
Proper guidelines to compose a legal description for the purpose of delineating an area of land or space. Prerequisite: SURV 61 or evaluation by instructor. Reading Level 1. Hours: (54) 3 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.
WELDING

WELD 1a-1b  INTRODUCTION TO THE WELDING PROCESSES (1.5 - 1.5 units)
Properties and characteristics of metals and a survey of metal welding processes. Safety, theory, and practical experience in oxy-acetylene welding and cutting, shielded metal arc and MIG. Prerequisite: Reading Level 1 or evaluation by instructor. Hours: (54-54) 1 lect, 2 lab. CCS: Occupational Education. Transferable: CSU and Private Colleges. Note: Formerly WELD 1, WELD 70.

WELD 53a-53b  BEGINNING SHIELDED METAL ARC WELDING (1.5 - 1.5 units)
Basic arc welding theory and manipulative skills related to the shielded metal arc welding process, including welding in all positions with various electrodes. Prerequisite: Reading Level 1 or evaluation by instructor. Hours: (54-54) 1 lect, 2 lab. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Formerly WELD 53b, WELD 71.

WELD 53c-53d  STRUCTURAL PLATE CERTIFICATION (1.5 - 1.5 units)
Introduction to welding codes, welding discontinuities and practical welding. Experience on plate with shielded metal arc welding, based on the American Welding Society D1.1 structural code. Prerequisite: WELD 53b. Hours: (54-54) 1 lect, 2 lab. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Formerly WELD 53c, WELD 72.

WELD 65a-65b  ASME PIPE CERTIFICATION (1.5 - 1.5 units)
Welding safety, welding pipe in the 1G, 2G and 5G positions. An examination of the ASME Welding Code will also be covered. Prerequisites: Reading Level 1 or evaluation by instructor. WELD 53c with a grade of "C," or equivalent experience. Hours: (54-54) 1 lect, 2 lab. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Formerly WELD 65b.

WELD 65c-65d  API AND RELATED CERTIFICATION TESTING (1.5 - 1.5 units)
Welding safety, and welding pipe in the 6G position, pipe layout and the API 1104 pipe welding code will also be covered. Prerequisites: Reading Level 1 or evaluation by instructor. WELD 65a-65b with a grade of "C," or equivalent experience. Hours: (54-54) 1 lect, 2 lab. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Formerly WELD 65b.

WELD 66a-66b  WELDED STEEL STRUCTURES (1.5 - 1.5 units)
Safety, layout, oxy-acetylene cutting, plasma cutting, shielded metal arc, and gas metal arc welding for the fabrication and construction of steel projects. Prerequisites: Reading Level 1; or evaluation by instructor. Previous class or experience in gas, arc and gas metal arc welding recommended. Hours: (54-54) 1 lect, 2 lab. Field trips required. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Formerly WELD 66.
WELD 73  MAINTENANCE AND REPAIR WELDING (1.5 units)
Welding and cutting operations related to the repair of cast iron, carbon steel, aluminum, stainless steel, and bronze. Hardfacing, surfacing and metal identification is also covered. Prerequisites: WELD 1a or WELD 53a with a grade of “C,” or equivalent experience. Reading Level 1 or evaluation by instructor. Hours: (54) 1 lect, 2 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

WELD 74a–74b  INTRODUCTION TO TIG AND MIG WELDING (1.5–1.5 units)
Theory and application of TIG, MIG, Fluxcore, and Submerged welding processes. Emphasizes safe and proper operation of these welding processes while welding on mild steel, aluminum, and stainless steel Prerequisites: Reading Level 1 or evaluation by instructor, WELD 1a or WELD 53a with a grade of “C,” or equivalent experience. Hours: (54-54) 1 lect, 2 lab. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Formerly WELD 74.

WELD 78a–78b  ADVANCED TIG AND MIG WELDING (1.5–1.5 units)
Advanced technical and related skill development in Gas Tungsten Arc Welding (TIG) and Gas Metal Arc Welding (MIG) processes. Emphasizes development of skills and knowledge necessary to produce high quality groove welds in various welding positions. Prerequisites: Reading Level 1 or evaluation by instructor. WELD 74a with a grade of “C,” or equivalent experience. Hours: (54-54) 1 lect, 2 lab. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Formerly WELD 78.

WELD 79  WELDING INSPECTION (2 units)
Theory and application of various welding codes and standards applicable to inspection process. Practical inspection of welds, involving knowledge of the various codes, standards, and specifications, welding procedures and weld performance qualification requirements, acceptance standards, welding processes, destructive and non-destructive test methods and welding metallurgy. Prerequisites: Reading Level 1 or evaluation by the instructor. WELD 1a or WELD 53a with a grade of “C,” or equivalent experience. Hours: (36) 2 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

WELD 90  GENERAL WELDING (12 units)
Enter-level welding skill development in modern welding and cutting processes, theory and practice. Prerequisites: Reading Level 2, concurrent enrollment in IND T 90 and eligibility for the Bakersfield College Employer’s Training Resource Program. Hours: (450) 6 lect, 19 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.
WOOD

WOOD 1 BEGINNING HAND WOODWORKING (3 units)
Basic woodworking processes and materials, use and care of hand tools, limited machine use, wood finishing, lathe turning, bent lamination, and hand carving. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (108) 2 lect, 4 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

WOOD 2 BEGINNING MACHINE WOODWORKING (3 units)
Skill development on the use and care of portable and stationary woodworking machines. The use of basic wood joint techniques, surface preparation, glueing, clamping and assembly is emphasized. **Prerequisite:** Reading Level 1 or evaluation by instructor. **Hours:** (108) 2 lect, 4 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

WOOD 55ab INTERMEDIATE CABINETMAKING (1.5 – 1.5 units)
Machine woodworking for students with prior basic knowledge of woodworking machines and basic construction and assembly techniques. Emphasizes cabinet construction for industry, styles and designs, materials and handling, and basic estimating skills. **Prerequisite:** WOOD 2 or evaluation by instructor. **Hours:** (108) 1 lect, 2 lab. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly WOOD 55.

WOOD 65ab ADVANCED CABINETMAKING (1.5 – 1.5 units)
Machine woodworking emphasizing new designs including modular as well as European cabinet construction, new materials and processes, Kortron, melamine, high density particle board, as well as others. Advanced bidding techniques are discussed. **Prerequisite:** WOOD 55ab or evaluation by instructor. **Hours:** (108) 1 lect, 2 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly WOOD 65a.

WOOD 65cd ADVANCED CABINETMAKING (1.5 – 1.5 units)
Machine and hand techniques necessary for top-end construction emphasized. Non-residential type cabinets studied. Economical use of solid lumber will be shown. Architecture millwork such as frame and panel wainscoat, bookcases, desks, bars, doors, skylights and windows demonstrated. Also included are commercial applications such as store fixtures, counters and reception desks. **Prerequisite:** WOOD 65ab or evaluation by instructor. **Hours:** (108) 1 lect, 2 lab. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly WOOD 65b.
LEARNING SKILLS

Learning Center
Learning Skills
Reading

GRACE VAN DYKE BIRD LIBRARY

The Library, with its organized collection of print and non-print media, supplements and enhances course work, facilitates student research and encourages recreational reading. Reference assistance and bibliographic instruction are available. ENGL 34 classes in research methods are conducted and General Studies 10, a self-paced reading course under library staff supervision, may be started any time during the semester.

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 is recommended to students who read at Level 3 on the Bakersfield College Placement Assessment, or who are classified as Level 4 English. Students with a Level 2 classification in reading can work on their writing skills by enrolling in Learning Skills 68. In addition, the short-term Learning Skills 70 series provide students reading at Level 2 or higher an opportunity to gain or improve study skills necessary to succeed in their other academic courses.

Supportive services and a few special classes are also offered for students with learning disabilities.

Students who have not met the reading proficiency requirements should take Reading 50. (See course prerequisites for both RDNG 50 and RDNG 62 regarding appropriate placement.)

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: lect lecture; lab laboratory; demo demonstration; Repeat repeatability; CCS Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. NOTE: If repeatability is not shown, course may not be repeated.
LEARNING SKILLS

LRN S 5  TUTOR TRAINING AND PRACTICUM (2 units)
The student will learn essential human relations skills and methods of effective tutoring, and will put these skills into practice with tutees referred by the Tutor Coordinator. **Prerequisite:** Reading Level 1 and a minimum grade of “B” in the subject to be tutored. Recommendation from student’s subject-area instructor(s) and evaluation by the Tutor Coordinator. **Hours:** (54) 18 lect/discussion, 36 supervised tutoring. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

LRN S 5a  TUTOR TRAINING AND PRACTICUM (1 unit)
The student will learn essential human relations skills and methods of effective tutoring, and will put these skills into practice with tutees referred by the Tutor Coordinator. **Prerequisite:** Reading Level 1 and a minimum grade of “B” in the subject to be tutored. Recommendation from student’s subject-area instructor(s) and evaluation by the Tutor Coordinator. **Hours:** (28) 16 lect/discussion, 12 supervised tutoring. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

LRN S 22  AUDITORY PERCEPTUAL/CONCEPTUAL DEVELOPMENT (2 units)
Beginning course recommended for teachers and tutors who want to learn the principles and techniques of using the LAC Test (Lindamood Auditory Conceptualization Test) and the ADD Program (Auditory Discrimination in Depth Program). Emphasizes assessing and developing a receptive/expressive base of auditory conceptualization. **Prerequisite:** Reading Level 1. A score of 88 or above on the LAC (Lindamood Auditory Conceptualization) Test. May be taken concurrently with LRN S 22a. **Hours:** (36) 2 lect for 18 weeks or 9 lect for 4 weekends. **Repeat:** 1. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

LRN S 22a  AUDITORY PERCEPTUAL/CONCEPTUAL DEVELOPMENT PRACTICUM (1 unit)
A practicum for LRN S 22. Practice techniques under direct supervision of the instructor by working with students enrolled in LRN S 122a. **Prerequisite:** Reading Level 1. A score of 88 or above on the LAC (Lindamood Auditory Conceptualization) Test. Completion of or concurrent enrollment in LRN S 22 required. **Hours:** (18) 1 lect/practicum. **Repeat:** 1. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

LRN S 68  BASIC WRITING DEVELOPMENT (4 units)
Designed for students whose English placement tests indicate they are not ready for English 60. Emphasizes writing practice and the review of basic grammatical structures, writing mechanics, and proper usage. **Prerequisite:** Reading Level 2 with a minimum score of 17 on the Asset Reading Assessment. English Level 4 or recommendation of a Bakersfield College English instructor. Bilingual/bi-cultural students should have successfully completed ENGL 77ac and ENGL 77df. **Hours:** (72) 4 lect/discussion. **Repeat:** 1. **CCS:** Remedial Education. **Not Transferable:** Not degree applicable.
LRN S 70a–e  STUDY SKILLS (0.5–3 units. Limit 3 units.)
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—Notetaking; 70c—Textbook Reading; 70d—Test Taking; 70e—Memory. (Credit/No Credit.) Prerequisite: Reading Level 1, OR Reading Level 2 with a score of 20 or above on the ASSET Reading Assessment. Hours: (9-54) 6 lect, 3 lab for each 0.5 unit. Repeat: 2, or until a limit of 3 units is reached. CCS: Remedial Education. Not Transferable: Associate Degree only.

LRN S 77  UNDERSTANDING LEARNING DISABILITIES (0.5 unit)
Provides the student with an overview of the field of learning disabilities including His­
tory of LD, current research, visual perception-training techniques, and suggested compen­
satory skills for coping with a specific disability. Prerequisite: Recommendation of
Learning Disability Specialist. Reading Level 2. Hours: (9) 2 lect, 1 by arrangement for
4 weeks. CCS: Remedial Education. Not Transferable: Not degree applicable.

LRN S 78  SPECIALIZED STUDY SKILLS (3 units)
Recommended for students with learning disabilities. Emphasizes learning “how to
learn.” Prerequisite: Reading Level 2 and recommendation of Supportive Services
Counselor and/or Learning Disabilities Specialist. Hours: (54) 3 lect. Repeat: 1.
CCS: Remedial Education. Not Transferable: Not degree applicable.

LRN S 79ab  SPECIAL BASIC SKILLS PRACTICE (1–2 units)
Recommended for students with learning disabilities. Emphasizes small group instruc­
tion in basic skills such as spelling, reading, comprehension, basic grammar, dictionary
and word identification strategies, and math. Prerequisite: Reading Level 2 and
recommendation of Supportive Services Counselor and/or Learning Disabilities
Specialist. Hours: (36-72) 4 lab for 9 weeks. Repeat: 4. CCS: Remedial Education.
Not Transferable: Not degree applicable.

LRN S 80  SUPERVISED TUTORING (0 unit)
Provides tutoring in various academic subjects, conducted in a designated learning center,
to augment classroom instruction. Prerequisite: Referred by subject-area instructor or
counselor on the basis of student’s difficulty. Hours: (170) 170 by arrangement. Repeat:
3. CCS: Remedial Education. Not Transferable: Not degree applicable.

LRN S 101  COMMUNICATION SKILLS (3 units)
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. Prerequisite: None. Hours: (84) 16 lect/classwork, 68 lab. Repeat:
1, after evaluation by instructor. CCS: Remedial Education. Not Transferable:
Associate Degree only.
LRN S 101h COMMUNICATION SKILLS (0.5–3 units)
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. Prerequisite: Open only to hearing impaired students. Hours: (16-90) 5 lect/lab for 3 units OR 16 laboratory for each ½ unit. Repeat: 3, as long as progress is demonstrated. CCS: Remedial Education. Not Transferable: Associate Degree only.

LRN S 122 ADD (AUDITORY DISCRIMINATION IN DEPTH) (1 unit)
Recommended for students who have an auditory conceptualization problem. Prerequisite: Three or more errors on the extended LAC Test and evaluation by instructor. Concurrent enrollment in LRN S 122a during first semester recommended. Hours: (18) 1 lect. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.

LRN S 122a TUTORING IN ADD (AUDITORY DISCRIMINATION IN DEPTH) (0.5–3 units. Limit 8 units)
Recommended for students who have an auditory conceptualization problem. Prerequisite: Three or more errors on the extended LAC Test and evaluation by instructor. Concurrent enrollment in LRN S 122 during the first semester recommended. Hours: (16-96) 16 lab/tutoring per 0.5 unit. Repeat: 3, or up to 8 units as long as progress is demonstrated. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.

LRN S 222a TUTORING IN ADD (AUDITORY DISCRIMINATION IN DEPTH)(0.5–3 units. Limit 8 units)
Recommended for students who have an auditory conceptualization problem. Prerequisite: Three or more errors on the extended LAC Test and evaluation by instructor. Hours: (16-96) 16 open entry/open exit lab/tutoring per 0.5 unit. Repeat: 3, or up to 8 units as long as progress is demonstrated. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only. Note: Identical to LRN S 122a except that it is open entry/open exit within a semester, but not beyond a semester.

LRN S 290 ADAPTIVE COMPUTER ACCESS STRATEGIES FOR DISABLED STUDENTS (0.5–2 units)
Adaptive access strategies will be developed using a combination of hardware/software specifically designed for students whose disabilities limit access to mainstream courses. Prerequisite: Admission to Supportive Services Center Program, evaluation by Supportive Services counselor, or Learning Disability instructor. Hours: (27-108) 1½ to 6 lab by arrangement. Repeat: 2, or until 6 units is reached. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.
LRN S 291 ADAPTIVE COMPUTER STRATEGIES FOR COGNITIVE RETRAINING (0.5 – 2 units)
Practice in thinking/reasoning strategies appropriate to students with learning disabilities or acquired brain injuries. **Prerequisite:** Admission to Supportive Services Center program, evaluation by Supportive Services counselor, or Learning Disability instructor. **Hours:** (27-108) 1½ to 6 lab by arrangement. **Repeat:** 2, or until 6 units is reached. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

READING

RDNG 50 READING FOR ACADEMIC SUCCESS (3 units)
Recommended for students who have not met the reading competency requirements at entrance or for 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. A satisfactory grade of “C” or higher will meet competency requirements in reading for the associate in arts and associate in science degrees. See page 64 in this catalog for explanation of competency requirements. **Prerequisite:** Reading Level 2 with a score of 20 through 22 on the ASSET Reading Assessment OR RDNG 62 with a grade of “C.” **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

RDNG 62 GENERAL READING (3 units)
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. **Prerequisite:** Reading Level 2 with a score of 17 through 19 on the Asset Reading Assessment, or evaluation by the instructor. **Hours:** (54) 3 lect. **Repeat:** 1. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

RDNG 72 READING FOR FOREIGN AND BILINGUAL STUDENTS (3 units)
Recommended for foreign and bilingual students who need to improve reading comprehension and build vocabularies in English. Students will practice the skills of looking for main ideas, summarizing and making inferences. They will also build vocabulary through word study and learn to use correct grammar patterns from the reading selections. **Prerequisite:** Completion of ENGL 75ab or SPCH 75ab and 75cd, or a qualifying score on the Reading Placement Test for foreign students, or evaluation by instructor. **Hours:** (54) 3 lect/discussion. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

RDNG 73 INTERMEDIATE READING FOR FOREIGN AND BILINGUAL STUDENTS (3 units)
Recommended for foreign and bilingual students who need to improve reading comprehension and build their vocabulary in English. Students will practice the skills of looking for main ideas and making inferences. They will also build vocabulary through word study and learn to use the correct grammar patterns from the reading selections. **Prerequisite:** Completion of RDNG 72, or a qualifying score on the Reading Placement Test for foreign students, or evaluation by instructor. **Hours:** (54) 3 lect/discussion. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.
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 micro organisms. Isolates and makes cultures of significant bacteria. Identifies micro organism by microscopic examination. Makes chemical analyses of substances such as enzymes, alcohols and acids produced by bacteria and other micro organisms.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1a</td>
<td>5.0</td>
<td>BIOL 1a</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM 1b</td>
<td>5.0</td>
<td>BIOL 1b</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM 8</td>
<td>3.0</td>
<td>BIOL 1c</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM 9</td>
<td>3.0</td>
<td>PHYSC 2a</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM 5</td>
<td>4.0</td>
<td>PHYSC 2b</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Recommended Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BACT 2</td>
<td>4.0</td>
<td>MATH 6a</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**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.
ASSOCIATE IN SCIENCE DEGREE PROGRAM

CLINICAL LABORATORY ASSISTANT

Clinical Laboratory Assistants perform a wide variety of technical laboratory procedures which assist the physician in the diagnosis and treatment of disease. Their work is done under the supervision of a Clinical Laboratory Scientist/Medical Technologist in hospitals, clinics, private and independent laboratories or in physician office laboratories throughout the United States.

The Clinical Laboratory Assistant curriculum is designed as a career ladder and offers the graduates a promising future with many opportunities for advancement. The program can be completed in two years by taking the first year at Bakersfield College and the second at Cal State Bakersfield. The student can obtain an Associate Degree from Bakersfield College and/or a certificate of program completion from Cal State Bakersfield. Likewise, the student can continue his/her education, obtain a Bachelor's degree, and become eligible for certification and licensure as a Clinical Laboratory Scientist. Clinical Laboratory Scientists may specialize in one of the scientific areas and obtain a Masters or Doctoral degree.

Required Courses – Bakersfield College – 27

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>UN</th>
<th>Course</th>
<th>Credits</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 1</td>
<td>4.0</td>
<td></td>
<td>ENGL 1a</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>BACT 2</td>
<td>4.0</td>
<td></td>
<td>MATH 22</td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td>CHEM 11</td>
<td>5.0</td>
<td></td>
<td>PHYSL 1</td>
<td>5.0</td>
<td></td>
</tr>
</tbody>
</table>

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>UN</th>
<th>Course</th>
<th>Credits</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1a</td>
<td>4.0</td>
<td></td>
<td>CHEM 1a</td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td>BIOL 1b</td>
<td>4.0</td>
<td></td>
<td>CHEM 1b</td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td>BIOL 1c</td>
<td>4.0</td>
<td></td>
<td>PHYSL 2a</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PHYSL 2b</td>
<td>4.0</td>
<td></td>
</tr>
</tbody>
</table>

Recommended Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>UN</th>
<th>Course</th>
<th>Credits</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 12</td>
<td>3.0</td>
<td></td>
<td>MATH 6a</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>CHEM 8</td>
<td>3.0</td>
<td></td>
<td>MATH 6b</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>CHEM 9</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 5</td>
<td>4.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>UN</th>
<th>Course</th>
<th>Credits</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1a</td>
<td>4.0</td>
<td></td>
<td>CHEM 1a</td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td>BIOL 1b</td>
<td>4.0</td>
<td></td>
<td>CHEM 1b</td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td>BIOL 1c</td>
<td>4.0</td>
<td></td>
<td>PHYSL 2a</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PHYSL 2b</td>
<td>4.0</td>
<td></td>
</tr>
</tbody>
</table>

Recommended Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>UN</th>
<th>Course</th>
<th>Credits</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 12</td>
<td>3.0</td>
<td></td>
<td>MATH 6a</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>CHEM 8</td>
<td>3.0</td>
<td></td>
<td>MATH 6b</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>CHEM 9</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 5</td>
<td>4.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Required Courses – Cal State Bakersfield – 30 Quarter Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLS 321.001</td>
<td>Hematology 1 Lecture</td>
<td>3.0</td>
</tr>
<tr>
<td>CLS 351</td>
<td>Clinical Microscopy 1</td>
<td>2.0</td>
</tr>
<tr>
<td>CLS 203</td>
<td>General Organic Chemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>CLS 151</td>
<td>Phlebotomy Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>CLS 326.001</td>
<td>Clinical Chemistry 1 Lecture</td>
<td>3.0</td>
</tr>
<tr>
<td>CLS 352</td>
<td>Basic Immun/Serology</td>
<td>2.0</td>
</tr>
<tr>
<td>CLS 353</td>
<td>Applied Immun/Serology</td>
<td>2.0</td>
</tr>
<tr>
<td>CLS 250</td>
<td>Clinical Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>CLS 314.001</td>
<td>Med Micro Lecture</td>
<td>3.0</td>
</tr>
<tr>
<td>CLS 322.001</td>
<td>Immunohematology 1 Lecture</td>
<td>2.0</td>
</tr>
<tr>
<td>CLS 260</td>
<td>Simulated Clinical Laboratory</td>
<td>4.0</td>
</tr>
</tbody>
</table>

### CLINICAL LABORATORY ASSISTANT CERTIFICATE

A certificate attesting successful completion of the Clinical Laboratory Assistant Program is awarded by California State Bakersfield, Bakersfield. Students must have completed a minimum of 29 units of the program at CSB to be eligible for the certificate. For a complete detail description of CSB courses, refer to CSB catalog.

### PRE-PROFESSIONAL

The following courses of study are recommended for those students who require pre-professional educational preparation in:

#### PRE-MEDICINE; PRE-OPTOMETRY; PRE-PHARMACY

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1a</td>
<td>Prin Animal Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL 1c</td>
<td>Prin Cellular Biol</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM 1a</td>
<td>Gen Chemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM 1b</td>
<td>Gen Chem/Chem Anal</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**Other Suggested Courses**

- BACT 2 Bacteriol-Microbiol (4)
- ANAT 1 Human Anatomy (4)
- PHYSL 1 Human Physiology (5)

#### PRE-DENTISTRY; PRE-VETERINARY MEDICINE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1a</td>
<td>Prin Animal Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL 1c</td>
<td>Prin Cellular Biol</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Other Suggested Courses**

- ANAT 1 Human Anatomy (4)
- PHYSL 1 Human Physiology (5)
COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability; **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. **NOTE:** If repeatability is not shown, course may not be repeated.

ANATOMY

**ANAT 1  HUMAN ANATOMY (4 units)**
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. **Prerequisites:** Satisfactory completion of a high school biology course with a laboratory or one semester of college biology. Reading Level 1. **Hours:** (144) 2 lect and 6 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

BACTERIOLOGY

**BACT 2  GENERAL BACTERIOLOGY AND MICROBIOLOGY (4 units)**
Designed to fulfill the needs/requirements for students pursuing careers in pre-nursing, home economics, dental hygiene, optometry, physical education, engineering and the biological sciences. Topics included are: history, morphology, ecology, effects of physical and chemical agents, microbial biochemistry, immunity, vaccination, public health, disease organisms as they affect man, the sanitation of food, water, sewage treatment and industrial applications. **Prerequisite:** Reading Level 1. CHEM 11 or 2a. **Hours:** (144) 2 lect, 6 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

BIOLOGY

**BIOL 1a  PRINCIPLES OF ANIMAL BIOLOGY (4 units)**
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. **Prerequisites:** One year of high school chemistry and biology. Reading Level 1. **Hours:** (144) 2 lect, 6 lab and 1 all-day field trip. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. (CAN: BIOL 4)

**BIOL 1b  PLANT BIOLOGY (4 units)**
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. **Prerequisites:** High school chemistry and biology. Reading Level 1. **Hours:** (144) 2 lect, 6 lab and 1 all-day field trip. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. (CAN: BIOL 6)
BIOL 1c  PRINCIPLES OF CELLULAR BIOLOGY (4 units)
A course for biology majors including topics common to plants and animals: biochemistry, cell structure and function, genetics, ecology and evolution. Prerequisites: CHEM 1a and either BIOL 1a or 1b. Hours: (108) 3 lect, 3 lab and 1 all-day field trip. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

BIOL 11  CONCEPTS OF BIOLOGY (4 units)
An introductory course in biological science illustrating the principles of organization, function and evolution of plants and animals, with particular emphasis on man. Prerequisite: BIOL 53 with a grade of "C" or high school sciences with grades of "C." Reading Level 1. Hours: (108) 3 lect, 3 demo/discussion/lab per week, plus at least one Saturday field trip. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

BIOL 12  NATURAL HISTORY (3 units)
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. Prerequisites: A basic course in college biology. Reading Level 1. Hours: (90) 2 lect, 3 lab. Several field trips will be scheduled during lab time and at least one Saturday field trip may be required. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

BIOL 18  FIELD BOTANY (2 units)
Study of the key features of native plants in the field and in the lab. Emphasis will be given to the collection, identification and ecological relationships of the local flora. Prerequisites: A basic course in biology. Reading Level 1. Hours: (54) 1 lect, 2 lab. A minimum of two Saturday field trips is required. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

BIOL 21  SPECIAL PROJECTS IN BIOLOGY (1 – 2 units)
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. Prerequisites: A basic course in college biology. Reading Level 1. Hours: (36-72) 2 hours per week per unit. Field trips by arrangement. Repeat: 3 times or until 4 units is reached. Department approval is needed prior to registration. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

BIOL 35a  KERN COUNTY WILDFLOWERS (1 unit)
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. Prerequisite: Reading Level 1. Hours: (18) 18 lect/discussion/field trips. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.
BIOL 35b  KERN COUNTY VERTEBRATES (1 unit)
Provides classroom and field experiences in the behavior and identification of amphibians, reptiles, birds, and mammals. Emphasis will be given to the activities and concepts which are useful in teaching elementary and secondary school. Consideration will be given to the role of the environmental changes and the populations of key local vertebrate species. **Prerequisite:** Reading Level 1. **Hours:** (18) 18 lect/discussion/field trips. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

BIOL 35c  INSECTS (1 unit)
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. **Prerequisite:** Reading Level 1. **Hours:** (18) 18 lect/lab. A field trip for collection is required. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

BIOL 35d  KNOW YOUR BODY (1 unit)
Provides some classroom lecture and laboratory experiences regarding human anatomy, physiology and pathology. Emphasizes the concepts and activities which are useful in teaching elementary and secondary school. Consideration will be given to improvement of personal and student health and fitness. **Prerequisite:** Reading Level 1. **Hours:** (18) 18 lect/lab/demo. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

BIOL 35e  FRESH WATER BIOLOGY (1 unit)
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. **Prerequisite:** Reading Level 1. **Hours:** (18) 18 lect/lab/field trips. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

BIOL 35f  SEASHORE LIFE (1 unit)
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. **Prerequisite:** Reading Level 1. **Hours:** (18) 18 lect/lab/field trip. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

BIOL 35g  CALIFORNIA HABITATS (1 unit)
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. Weekend field trips are an integral part of the course and provide students an opportunity to identify and study organisms as parts of natural communities. **Prerequisite:** Reading Level 1. **Hours:** (18) 18 lect/field trips. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.
BIOL 53  GENERAL BIOLOGY (3 units)
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. Prerequisite: Reading Level 2. Hours: (72) 2 lect, 2 lab/demo and field trips by arrangement. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only. Note: Not open for credit to students who have already completed BIOL 1a, BIOL 11, PHYSL 1 or high school biology with a grade of "B."

ENVIRONMENT
ENVIR 1  ENVIRONMENT AND MAN (3 units)
Major consideration will be given to the process which will sustain humans on this planet. Topics to be included: the relevance of ecology to human affairs; historical aspects of ecological principles; population ecology; and ecology and the human future. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

HEALTH SCIENCE
HL SC 1  SURVEY OF ANATOMY AND PHYSIOLOGY (4 units)
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. Prerequisite: Reading Level 1. Hours: (108) 6 lect/demo/lab. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges. Credit limitations. For specific information see counselor.

PHYSIOLOGY
PHYSL 1  HUMAN PHYSIOLOGY (5 units)
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. Prerequisite: Any one of the following courses: CHEM 1a, 2a, 11, ANAT 1, BIOL 1a, 11. Hours: (162) 3 lect, 6 lab. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.
# MATHEMATICS

## Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 6a</td>
<td>4.0</td>
<td>MATH 6d</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 6b</td>
<td>4.0</td>
<td>MATH 6e</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 6c</td>
<td>4.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Recommended Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 7</td>
<td>3.0</td>
<td>COM S 18</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYS C</td>
<td>4.0</td>
<td>MATH 22</td>
<td>5.0</td>
</tr>
<tr>
<td>COM S 5</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability; **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. **NOTE:** If repeatability is not shown, course may not be repeated.

### MATH A ELEMENTARY ALGEBRA (3 units)

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. **Prerequisite:** Qualifying score on entrance examination and/or evaluation by instructor. **Hours:** (90) 5 lect. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

### MATH B GEOMETRY (3 units)

Includes congruence and similarity of triangles, parallel and perpendicular lines, quadrilaterals, polygons, circles, the Pythagorean Theorem, ratio and proportion, and area. Deductive reasoning with various methods of proof are used extensively. **Prerequisites:** MATH A or one year of high school algebra with a grade of “C”; Reading Level 1. **Hours:** (90) 5 lect. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

### MATH C PLANE TRIGONOMETRY (3 units)

Definitions of trigonometric functions, graphs of trigonometric functions, use of trigonometric functions in problem solving, derivation of trigonometric identities, verification of trigonometric identities, solutions of conditional trigonometric equations,
study of inverse trigonometric functions, complex numbers, trigonometric form of complex numbers and DeMoivre’s Theorem. Prerequisites: Plane geometry and grade of “C” in either advanced high school algebra or MATH D; Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

MATH D INTERMEDIATE ALGEBRA (4 units)
Sets and set operations, fundamental operations, signed numbers, factoring, linear equations, simple and complex fractions, functional notation, simple graphs, exponents and radicals, quadratic equations, the conics, variation, determinants, logarithms, exponential equations, sequences and series and the binomial expansion. Prerequisite: Grade of “C” in either one year of high school algebra or MATH A. Reading Level 1. Hours: (90) 5 lect. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.

MATH 1 MATHEMATICAL ANALYSIS (3 units)
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 and methods of proof. Prerequisite: MATH D or equivalent. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

MATH 2 BASIC FUNCTIONS AND CALCULUS FOR BUSINESS (4 units)
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. Prerequisite: Two years of high school algebra with a present working knowledge of algebra or MATH D or equivalent. Hours: (72) 4 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

MATH 6a ANALYTIC GEOMETRY AND CALCULUS I (4 units)
Elements of analytic geometry, differential calculus and introduction to integration of algebraic functions. Prerequisite: MATH 1 or equivalent, with a grade of “C.” Hours: (72) 4 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

MATH 6b ANALYTIC GEOMETRY AND CALCULUS II (4 units)
Transcendental functions, polar coordinates, sequences, infinite series and methods of integration. Further exposure to techniques and applications of differential and integral calculus. Prerequisite: MATH 6a or equivalent, with a grade of “C.” Hours: (72) 4 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

MATH 6c CALCULUS III (4 units)
Continuation of Calculus II. Vectors and parametric equations, vector-valued functions, partial differentiation, multiple integrals, vector analysis, including theorems of Green, Gauss and Stokes. Prerequisite: MATH 6b or equivalent with a grade of “C.” Hours: (72) 4 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.
MATH 6d  ORDINARY DIFFERENTIAL EQUATIONS (3 units)
Vector spaces and linear transformations; elementary differential equations; Laplace transforms; series solutions and systems of differential equations; matrices and eigenvalues. Prerequisite: MATH 6c or equivalent, with a grade of “C.” Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. (CAN: MATH 24)

MATH 6e  ELEMENTARY LINEAR ALGEBRA (3 units)
Real and complex number fields, vector spaces, linear transformation, matrices, systems of equations and matrix inversion, determinants, eigenvalues and eigenvectors. Prerequisite: MATH 6c or equivalent, with a grade of “C.” Concurrent enrollment in MATH 6d recommended. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

MATH 21  SPECIAL PROJECTS IN MATHEMATICS (1 unit. Limit 2 units)
Individually directed work in mathematics, including advanced topics, research projects, special problems and applications of mathematics to specific subject areas. Prerequisite: Completion of a basic course in mathematics with a grade of “B” and evaluation by instructor. Reading Level 1. Hours: (18-36) 1 lab. Repeat: 1. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

MATH 22  ELEMENTARY PROBABILITY AND STATISTICS (5 units)
Graphical methods of description of data, finite probability; discrete and continuous random variables; sampling distributions; hypothesis testing for large and small samples, analysis of variance, nonparametric statistics; linear regression and correlation. Prerequisite: MATH D or equivalent. Hours: (90) 5 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC Credit limitations. For specific information see counselor. (CAN: STAT 2)

MATH 50  MODERN COLLEGE ARITHMETIC AND PRE-ALGEBRA (3 units)
A general review of basic arithmetic including the operation of addition, subtraction, multiplication and division of whole numbers, decimals, fractions and percents. Emphasizes numbers, ratio and proportion, and simple equations. Prerequisite: Qualifying score on entrance examination and/or evaluation by counselor. Reading Level 2. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.

MATH 60  BASIC ARITHMETIC (3 units)
Basic arithmetic for the student weak in fundamentals and mathematical concepts. Prerequisites: Counselors recommendation and qualifying test score. Reading Level 3. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.

MATH 200a  ELEMENTARY ALGEBRA (3 units)
Self-paced, open entry/open exit. For description, see MATH A.

MATH 200c  PLANE TRIGONOMETRY (3 units)
Self-paced, open entry/open exit. For description, see MATH C.
MATH 200d  INTERMEDIATE ALGEBRA (4 units)
Self-paced, open entry/open exit. For description, see MATH D.

MATH 250  MODERN COLLEGE ARITHMETIC AND PRE-ALGEBRA (3 units)
Self-paced open entry/open exit. For description, see MATH 50.

MATH 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

| UN   | MUSIC 1ab Elementary Theory | 8.0 |
| UN   | MUSIC 5ab Class Piano       | 2.0 |

Group Performance (Select one each semester)

| UN   | MUSIC 10ad Concert Band     | 4.0 |
| UN   | MUSIC 12ad College Orchestra| 4.0 |

Other Suggested Courses

| UN   | MUSIC 2 Basic Elmnts/Music  | 3.0 |
| UN   | MUSIC 5cd Class Piano       | 2.0 |
| UN   | MUSIC 6ab Class Voice       | 2.0 |
| UN   | MUSIC 6cd Class Voice       | 2.0 |
| UN   | MUSIC 9ac Class Guitar      | 1.0 |
| UN   | MUSIC 13ad Jazz Ensemble    | 4.0 |
| UN   | MUSIC 54a College Chorale   | 1.0 |
| UN   | MUSIC 54b College Chorale   | 1.0 |

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: lect lecture; lab laboratory; demo demonstration; Repeat repeatability; CCS Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. NOTE: If repeatability is not shown, course may not be repeated.
MUSIC 1a–1b ELEMENTARY THEORY (4–4 units)
A comprehensive study of tonal harmony through an integrated writing, analytical, keyboard, computer assisted instruction, and ear training approach. **Prerequisite:** Reading Level 1. MUSIC 2 or evaluation by instructor. 1a: Must be concurrently enrolled in MUSIC 15a; 1b: Must be concurrently enrolled in MUSIC 15b. **Hours:** (126) 3 lect, 4 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

MUSIC 2 BASIC ELEMENTS OF MUSIC (3 units)
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. **Prerequisite:** Reading Level 1. Must be concurrently enrolled in MUSIC 16. **Hours:** (90) 3 lect, 2 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

MUSIC 3ab INTERMEDIATE THEORY (3 units)
A comprehensive study of the chromatic development in harmony during the 18th, 19th and 20th century through an integrated written theoretical, analytical, and aesthetic approach. **Prerequisite:** MUSIC 1a-1b or equivalent and evaluation by instructor. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

MUSIC 5a–5b–5c–5d CLASS PIANO (1–1–1–1 unit)
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. **Prerequisite:** 5a: None. **Hours:** (36 each) 2 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

MUSIC 6a–6b–6c–6d CLASS VOICE (1–1–1–1 unit)
Elementary solo vocal training. Emphasizes breath control, placement of tone, posture and other basic concepts. 6b–6c–6d emphasizes repertoire and further technical development. **Prerequisite:** 6a: None. A basic understanding of music fundamentals, although not required, would be highly desirable. **Hours:** (36 each) 2 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

MUSIC 9a CLASS GUITAR (1 unit)
Designed to teach the student how to play the guitar. Correct right and left hand technique, how to read guitar music, basic chords, finger-picking and strumming. **Prerequisite:** A suitable acoustic guitar required. **Hours:** (36) 2 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.
MUSIC 9b  INTERMEDIATE CLASS GUITAR (1 unit)
Designed to teach intermediate techniques of guitar playing. The student will learn advanced chord positions, scales, arpeggios, slurs, and bar chords. **Prerequisite:** MUSIC 9a or equivalent. A suitable acoustic guitar required. **Hours:** (36) 2 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

MUSIC 9c  ADVANCED CLASS GUITAR (1 unit)
Designed to teach advanced techniques of guitar playing. Advanced chord positions, scales, arpeggios, slurs, bar chords and more extensive playing of repertoire. **Prerequisite:** MUSIC 9b or equivalent. A suitable acoustic guitar required. **Hours:** (36) 2 laboratory. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

MUSIC 10a–10b–10c–10d  CONCERT BAND
(Fall: 2 units; Spring: 1 unit)
Emphasizes rehearsal and performance of standard band literature. Public performances such as athletic games, assemblies and concerts are required. **Prerequisite:** Evaluation by instructor. **Hours:** (F: 72; Sp: 72) Fall: 4 lab; Spring: 3 lab and 1 hour by arrangement. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

MUSIC 12a–12b–12c–12d  COLLEGE ORCHESTRA (1–1–1–1 unit)
Performance of standard works from the orchestra literature. Open to advanced students playing orchestra instruments. Contact instructor to arrange audition. **Prerequisite:** Previous experience and audition for instructor. **Hours:** (54 each) 3 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

MUSIC 13a–13b–13c–13d  JAZZ ENSEMBLE (1–1–1–1 unit)
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. **Prerequisite:** Evaluation by instructor. **Hours:** (54 each) 3 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

MUSIC 14a–14b–14c–14d  COLLEGE CHOIR (2–2–2–2 units)
A choral ensemble of select voices which will study major choral literature of all the historical periods. Public performance required for credit. **Prerequisite:** Previous experience in a choral group and demonstrated proficiency, and audition for instructor. **Hours:** (54) 3 lect/1 by arrangement. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.
MUSIC 15a–15b  EAR TRAINING (1–1 unit)
An integrated study of the aural aspects of tonal harmony, emphasizing the mastering of
solfeggio, dictation, pitch relation and interval recognition. Prerequisite: Reading Level 1. 15a: Concurrent enrollment in MUSIC 1a; 15b: Concurrent enrollment in MUSIC 1b. Hours: (72-72) 4 lab. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

MUSIC 16  BEGINNING EAR TRAINING (1 unit)
Designed to develop aural providiency and facility in dictation, chord and interval recogni-
tion, and rhythm. Prerequisite: Must be concurrently enrolled in MUSIC 2 or be evaluated by instructor. The assignment of level within MUSIC 16 will be determined by the instructor. Hours: (36) 2 lab. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

MUSIC 17a–17b–17c–17d  CHAMBER SINGERS (2–2–2–2 units)
A select choral group, specializing in rehearsal and performance of all choral literature for all historical periods. Public performance required for credit. Prerequisite: Previous experience in a choral group and demonstrated proficiency. Audition for instructor. Hours: (54) 3 lect/1 lab by arrangement. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

MUSIC 19a–19b–19c–19d  MARCHING
AND ACTIVITIES BAND (1–1–1–1 unit)
The Marching Band participates in home game pageantry and halftime shows, away football game performances (when feasible), and parades. Emphasizes 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. Prerequisite: Definite skill on a band instrument and evaluation by instructor. Hours: (72) 4 lab. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

MUSIC 20  APPLIED MUSIC (1 unit. Limit 4 units)
Private instruction in the performance of orchestral instruments, voice and piano. Repertoire and study must follow departmental requirements. Two performance examinations are administered per semester and are reviewed by the music faculty. MUSIC 20wp Wind and Percussion Instruments. Prerequisite: Evaluation by instructor. Hours: (36) 2 lab. Repeat: One course may be taken four times or any combination of the four equaling four enrollments. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

MUSIC 21a–21b  SURVEY OF MUSICAL LITERATURE (3–3 units)
A survey of styles, practices and aesthetics, which traces the lines of musical develop-
ment 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. Prerequisite: Some knowledge of music and its terminology. Reading Level 1. Hours: (54-54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.
MUSIC 22abc  MUSIC APPRECIATION (3 units)
22a—22b—22c (1—1—1 unit) equivalent to 22abc.
An introduction to music as the listener's art. Concerts, records and film provide illustrations for directed listening as a basis of appreciation. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

MUSIC 23  APPRECIATION OF JAZZ (3 units)
Introductory course in the history and appreciation of jazz. Lectures, listening, laboratories and concert attendance are required. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

MUSIC 27  HISTORY OF AMERICAN POPULAR MUSIC (3 units)
An introduction to the historical and stylistic developments of Rock music, with emphasis on its social, economic and political consequences. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

MUSIC 51  BAKERSFIELD YOUTH SYMPHONY (0.5 — 1 unit)
An orchestra intended for skilled instrumental players from 7th grade through college. Rehearsal and performance of standard works of the orchestral repertoire. **Prerequisite:** Audition and evaluation by instructor. **Hours:** (17-54) 17 lab per one-half unit. Field trips required. **Repeat:** 3. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

MUSIC 53a—53b—53c—53d  JAZZ ENSEMBLE WORKSHOP (1—1—1—1 unit)
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. **Prerequisite:** Evaluation by instructor. **Hours:** (54 each) 3 lab. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

MUSIC 54a—54b—54c—54d  COLLEGE CHORALE (1—1—1—1 unit)
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. **Prerequisite:** Previous experience in a choral group and demonstrated proficiency. **Hours:** (54 each) 3 lab. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

MUSIC 230a—230b—230c  MUSIC LABORATORY (0.5 — 1 unit. Limit 4 units.)
The student will learn to read, decipher, and perform the many rhythmic combinations in music through a self-pacing programmed system. **Prerequisite:** None. **Hours:** (18-36 each) 18 lab per one-half unit. **Repeat:** 3, or until 4 units is reached. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.
The OPTIONS program is designed for re-entry students, new students, women and men in career change. It is a "package program" which meets three or five hours 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 in the five-unit OPTIONS program. Students will be given support and encouragement throughout the semester. 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. A battery of career tests will be given students to assist them in career exploration.

<table>
<thead>
<tr>
<th>Courses</th>
<th>UN</th>
<th>Other Suggested Courses</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>GN ST 13 OPTIONS:</td>
<td>1.0</td>
<td>GN ST 15 Career Shadowing</td>
<td>0.5</td>
</tr>
<tr>
<td>GN ST 13a Discovg</td>
<td>3.</td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>GN ST 15 Career</td>
<td>3.</td>
<td>COUNS15 Career Shadowing</td>
<td>0.5</td>
</tr>
<tr>
<td>GN ST 13b Orient</td>
<td>5.</td>
<td>GN ST 50 Choices/Challenges</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COUNS13b Orient</td>
<td>5.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</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

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 6a</td>
<td>3.0</td>
<td>PHIL 10</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL 7</td>
<td>3.0</td>
<td>PHIL 12</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Recommended Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 6b</td>
<td>3.0</td>
<td>PHIL 37</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL 14</td>
<td>3.0</td>
<td>SOC 1</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL 30</td>
<td>3.0</td>
<td>SOC 2</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL 32</td>
<td>3.0</td>
<td>POL S 2</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL 33</td>
<td>3.0</td>
<td>PSYCH 1a</td>
<td>3.0</td>
</tr>
</tbody>
</table>

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: lect lecture; lab laboratory; demo demonstration; Repeat repeatability; CCS Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. NOTE: If repeatability is not shown, course may not be repeated.

PHIL 6a—6b INTRODUCTION TO PHILOSOPHY (3–3 units)

A method, problems, and historical approach to philosophy through the reading of an introduction to philosophy text and selected philosophical classics. Areas of philosophy covered are epistemology (the study of knowledge), metaphysics (the study of reality), ethics (the study of morality), and philosophy of religion. Prerequisites: 6a: Reading Level 1. Eligibility for ENGL 1a recommended. 6b: PHIL 6a, 7, or 10. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.
PHIL 7 INTRODUCTION TO LOGIC (3 units)
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. **Prerequisite:** Reading Level 1. Eligibility for ENGL 1a recommended. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

PHIL 10 INTRODUCTION TO ETHICS (3 units)
The philosophical approach to the study of morality through the study of the meaning of ethics and the methods used in ethical theorizing and reasoning. Presents major ethical issues and theories and how to construct and handle one's own ethical system. **Prerequisite:** Reading Level 1. Eligibility for ENGL 1a recommended. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. Credit limitations. For specific information see counselor.

PHIL 12 ETHICS OF LIVING AND DYING (3 units)
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. **Prerequisite:** Reading Level 1. Eligibility for ENGL 1a recommended. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges. Credit limitations. For specific information see counselor.

PHIL 14 BUSINESS AND SOCIAL RESPONSIBILITY (3 units)
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. **Prerequisite:** Reading Level 1. Eligibility for ENGL 1a recommended. **Hours:** (54) 3 lect/discussion. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

PHIL 30 HUMANITIES THROUGH THE ARTS (3 units)
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. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.
PHIL 32  WORLD RELIGIONS: EAST (3 units)
An impartial presentation of the distinctive genius of the major religions of the East: Hinduism, Buddhism, Confucianism and Taoism. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

PHIL 33  WORLD RELIGIONS: WEST (3 units)
An impartial presentation of the distinctive genius of the major religions of the West: Judaism, Christianity, Islam. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

PHIL 37  INTRODUCTION TO THE WORLD'S RELIGIONS (3 units)
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. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.
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 in Arts and Associate in Science degree programs in most of its fields. These include two-year career training programs in geologic technology, industrial drawing, architectural drafting and engineering technology 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.

In the School of Architecture and Environmental Design at Cal Poly, there are five majors: Architecture, Architectural Engineering, Construction, City and Regional Planning, and Landscape Architecture. The Bachelor of Architecture Degree requires five years to complete. The other four majors are four-year degree programs. It is the exceptional student who is able to complete these programs in the allotted time. Many students find that it takes an additional year of study to complete any of the five programs listed above.

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.

<table>
<thead>
<tr>
<th>First Semester</th>
<th>UN</th>
<th>Second Semester</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 1</td>
<td></td>
<td>Intr Arch/Inter Des</td>
<td>1.0</td>
</tr>
<tr>
<td>ARCH 10</td>
<td></td>
<td>Freehand Drawing</td>
<td>2.0</td>
</tr>
<tr>
<td>MATH B</td>
<td></td>
<td>Geometry</td>
<td>3.0</td>
</tr>
</tbody>
</table>
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.

First Semester
ARCH 1 Intr Arch/Inter Des 1.0
ARCH 10 Freehand Drawing 2.0
ARCH 11 Intr Drwng/Perspctv 4.0
MATH 6a Analyt Geom Calc I 4.0

Second Semester
ARCH 6 Materials of Constr 2.0
ARCH 12 Basic Graphics 3.0
ARCH 21 Fund Envir Dsgn I 3.0
MATH 6b Analyt Geom Calc II 4.0
PHYS 4a Mech/Wave Motion 4.0

Third Semester
ARCH 22 Fund Envir Dsgn II 3.0
ARCH 30 Architec Model Bldg 1.0
ARCH 31 Archit Practice I 3.0
PHYS 4b Heat, Elec/Magnitism 4.0

Fourth Semester
ARCH 23 Fund Envir Dsgn III 3.0
ARCH 32 Archit Practice II 3.0
ARCH 33 Arch Comp Graphics 3.0
PHYS 4a Mech/Wave Motion 4.0

ADDITIONAL RECOMMENDED COURSES FOR CAL POLY, S.L.O.

Common to all five majors
PSYCH 1a General Psychology 3.0
SPCH 1 Speech Comunucatn 3.0

Construction
CHEM 1a General Chemistry 5.0
GEOL 1a Physical Geology 4.0
ENGR 1a Plane Surveying 3.0
ECON 10 Intro to Economics 3.0
BUS 18 Business Law 3.0
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 Design, 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

<table>
<thead>
<tr>
<th>UC BERKELEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended Courses</td>
</tr>
<tr>
<td>ARCH 1 Intr Arch/Inter Des</td>
</tr>
<tr>
<td>ARCH 10 Freehand Drawing</td>
</tr>
<tr>
<td>ARCH 11 Intr Drwng/Persctv</td>
</tr>
<tr>
<td>ARCH 12 Basic Graphics</td>
</tr>
<tr>
<td>ARCH 21 Fund Envir Dsgn I</td>
</tr>
</tbody>
</table>

**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 4a-4b.
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 2a-2b or 4a-4c) 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>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1a</td>
<td>5.0</td>
<td>MATH 6c</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM 1b</td>
<td>5.0</td>
<td>PHYS 4a</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH 6a</td>
<td>4.0</td>
<td>PHYS 4b</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH 6b</td>
<td>4.0</td>
<td>PHYS 4c</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Recommended Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 6d</td>
<td>3.0</td>
<td>COM S 10</td>
<td>3.0</td>
</tr>
<tr>
<td>COM S 5</td>
<td>3.0</td>
<td>COM S 18</td>
<td>3.0</td>
</tr>
</tbody>
</table>

ENGINEERING

ENGINEERING AND ENGINEERING TECHNOLOGY

People working in the field of engineering and related technical fields “bridge the gap” between scientific principles and the application of these principles to the needs of society. The field is quite diversified with exciting job opportunities for people with varied mathematical, scientific, and technical skills.

Engineers, engineering technologists, and engineering technicians are members of a technical team that also includes scientists and craftsmen. The members of the technical team perform job functions that are complimentary and sometimes overlapping. By virtue of their education, training, and interests, engineers, engineering technologists, and engineering technicians are usually differentiated as follows:

An engineer uses experience and judgment, as well as advanced training in engineering, science, and mathematics to formulate ideas and designs, and to determine standards, specifications, work orders and schedules so that projects can
be economically beneficial to mankind. A Bachelor of Science degree in Engineering is required. Many engineers earn Master’s or Doctor’s degrees.

An engineering technologist uses applied and basic training in mathematics, science, and engineering classes, engineering methods learned through classes and experience, and developed technical (manipulative) skills in direct support of engineering activities. A Bachelor of Science degree in Engineering Technology is required.

An engineering technician operates in a support role to aid in design, production, manufacturing, operations, and maintenance. Under professional direction, the engineering technician conducts tests, trouble shooting and analysis, and other similar projects, or carries out functions such as drafting, surveying, designing and technical sales. An Associate in Science degree or a Certificate of Engineering Technology is required.

Working together with a counselor or academic advisor, a student may develop a program of study leading to transfer into the upper division of a Bachelor’s degree program in Engineering or Engineering Technology, to an Associate degree in Engineering Technology, or to a certificate in a specific career field under Engineering Technology. The programs which follow will help the student plan an appropriate program.

**ENGINEERING**

**University of California, California State University 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 students of a California Community College, with a stated major in engineering, who presents a transcript showing satisfactory completion of the engineering core program in lower division will be eligible 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 following Bakersfield College courses are required to completely satisfy the engineering core program:

<table>
<thead>
<tr>
<th>UN</th>
<th>COURSE NAME</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 6a</td>
<td>Analyt Geom Calc I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH 6b</td>
<td>Analyt Geom Calc II</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH 6c</td>
<td>Analyt Geom Calc III</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH 6d</td>
<td>Ord Diff Equations</td>
<td>3.0</td>
</tr>
<tr>
<td>CHEM 1a</td>
<td>General Chemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM 1b</td>
<td>Gen Chem/Chem Anal</td>
<td>5.0</td>
</tr>
<tr>
<td>ENGL 1a</td>
<td>Expository Composit</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYSIC 4a</td>
<td>Mech/Wave Motion</td>
<td>4.0</td>
</tr>
<tr>
<td>UN</td>
<td>COURSE NAME</td>
<td>CREDIT HOURS</td>
</tr>
<tr>
<td>----</td>
<td>-------------</td>
<td>--------------</td>
</tr>
<tr>
<td>PHYSC 4b</td>
<td>Heat, Elec/Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYSC 4c</td>
<td>Optics/Modn Physcs</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGR 17</td>
<td>Electric Circuits</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR 24</td>
<td>Grph/Dscrp Geom</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR 36</td>
<td>Eng Mech/Statics</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR 45</td>
<td>Prop of Materials</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR 48</td>
<td>Engineering Orientat</td>
<td>1.0</td>
</tr>
<tr>
<td>COM S 18</td>
<td>Intr Prg w/FORT</td>
<td>3.0</td>
</tr>
</tbody>
</table>
The following courses are highly recommended for all branches of engineering:

| UN | MATH 6e Elem Linear Algebra | 3.0 |
| UN | ENGR 49 Analysis & Design | 1.0 |

The following courses are recommended for the particular branches listed:

ENGR 1ab — Plane Surveying — civil
GEOL 1a — Physical Geology — geological, petroleum
GEOL 15 — Petroleum Geology — petroleum
MATH 22 — Prob and Statistics — computer
COM S 10 — Pascal Prgrmng — electrical, computer; instead of, or in addition to COM S 18

Two-Year Engineering Program

The program shown below assumes satisfactory prior completion of the following:

(a) high school mathematics through trigonometry and mathematical analysis; or MATH C and MATH 1 at Bakersfield College
(b) one year of high school mechanical drawing or IN DR 30a at Bakersfield College
(c) one year of high school chemistry or CHEM 2a at Bakersfield College
(d) eligibility for ENGL 1a

Students missing one of the requirements (b), (c), or (d) still may be able to complete the program within two years, as long as requirement (a) is met on entrance. Students completing the two-year program will not be able to earn an A.S. degree from Bakersfield College unless they have satisfied general education requirements with summer courses or courses taken prior to entering the program.

<table>
<thead>
<tr>
<th>First Semester</th>
<th>UN</th>
<th>Second Semester</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 6a Analyt Geom Calc I</td>
<td>4.0</td>
<td>MATH 6b Analyt Geom Calc II</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM 1a General Chemistry</td>
<td>5.0</td>
<td>CHEM 1b Gen Chem/Chem Ana</td>
<td>5.0</td>
</tr>
<tr>
<td>COM S 18 Intr Prg w/FORT</td>
<td>3.0</td>
<td>PHYSC 4a Mech/Wave Motion</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGR 48 Engr Orientation</td>
<td>1.0</td>
<td>ENGR 24 Grph/Dscrp Geom</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR 49 Engr Analysis/Design</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Semester</th>
<th>UN</th>
<th>Fourth Semester</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 6c Analyt Geom Calc III</td>
<td>4.0</td>
<td>MATH 6d Ord Diff Equations</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYSC 4b Heat, Elec/Magntism</td>
<td>4.0</td>
<td>PHYSC 4c Optics/Modrn Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGR 45 Prop of Materials</td>
<td>3.0</td>
<td>ENGR 36 Eng Mech/Statics</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL 1a Expository Composit</td>
<td>4.0</td>
<td>ENGR 17 El Circ/Electron Dev</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 6e Elem Linear Algebra</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Three-Year Pre-Engineering/Engineering Program

Those students who have not met the requirements for the two-year program will need more than four semesters to complete the engineering core program. The program shown below assumes only satisfactory completion of high school mathematics through intermediate algebra or MATH D at Bakersfield College and eligibility for ENGL 1. It allows students to complete the general education requirements for the Associate in Science degree while completing the engineering core program before transferring to a university as a junior. Students completing the A.S. degree should select general education courses which will also satisfy university general education courses, and should understand that, while they will have completed more than 70 transferable units, the university will give them credit for satisfactory completion of all transferable courses but for only 70 units toward the Bachelor's degree.

<table>
<thead>
<tr>
<th>First Semester</th>
<th>UN</th>
<th>Second Semester</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH C, Plane Trigonometry</td>
<td>3.0</td>
<td>MATH 1, Math Analysis</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL 1, Intro Composition</td>
<td>3.0</td>
<td>CHEM 2a, Intro Gen Chem</td>
<td>5.0</td>
</tr>
<tr>
<td>IN DR 30a, Industrial Drawing</td>
<td>3.0</td>
<td>ENGR 24, Grph/Dscrp Geom</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR 48, Engineering Orientat</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Semester</th>
<th>UN</th>
<th>Fourth Semester</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 6a, Analyt Geom Calc I</td>
<td>4.0</td>
<td>MATH 6b, Analyt Geom Calc II</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM 1a, General Chemistry</td>
<td>5.0</td>
<td>CHEM 1b, Gen Chem/Chem Anal</td>
<td>5.0</td>
</tr>
<tr>
<td>COM S 18, Intr Prg w/FORT</td>
<td>3.0</td>
<td>PHYSC 4a, Mech/Wave Motion</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGR 49, Engr Analysis/Design</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fifth Semester</th>
<th>UN</th>
<th>Sixth Semester</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 6c, Analyt Geom Calc III</td>
<td>3.0</td>
<td>MATH 6d, Ord Diff Equations</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYSC 4b, Heat, Elec/Magnatism</td>
<td>4.0</td>
<td>PHYSC 4c, Optics/Modn Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGR 45, Prop of Materials</td>
<td>3.0</td>
<td>ENGR 36, Eng Mech/Statics</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL 1a, Expository Compos</td>
<td>4.0</td>
<td>ENGR 17, El Circ/Elctron Dev</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 6e, Elem Linear Algebra</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ENGINEERING TECHNOLOGY

Cal Poly Pomona, Cal Poly San Luis Obispo, California State University, Sacramento, Cogswell College, Northrop University

Bakersfield College offers courses required for two years of engineering technology education. Completion of these courses, called the "engineering technology core" prepares students either for transfer to the colleges and universities offering Bachelor's degrees in Engineering Technology, or for completion of an Associate in Science degree in Engineering Technology or certificate with specializations in electronics, industrial drawing, or petroleum. A beginning engineering technology student should have completed high school mathematics through intermediate algebra or MATH D at Bakersfield College, one year of high school drafting or IN DR 30a at Bakersfield College, and be eligible for ENGL 1.
The following courses are required to satisfy the engineering technology core and Associate in Science program:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 48</td>
<td>Engineering Orientat</td>
<td>1.0</td>
</tr>
<tr>
<td>ENGR 45</td>
<td>Prop of Materials</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR 24</td>
<td>Grph/Dscrp Geom</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 30b</td>
<td>Industrial Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 18</td>
<td>Intro/CADD</td>
<td>1.0</td>
</tr>
<tr>
<td>CHEM 2a</td>
<td>Intro Gen Chemistry</td>
<td>5.0</td>
</tr>
</tbody>
</table>

OR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCH T 1</td>
<td>Elem Mch Metlwkg</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 1</td>
<td>Intr Oxy/Acet Wldng</td>
<td>3.0</td>
</tr>
</tbody>
</table>

The following are highly recommended:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCH T 1</td>
<td>Elem Mch Metlwkg</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 1</td>
<td>Intr Oxy/Acet Wldng</td>
<td>3.0</td>
</tr>
</tbody>
</table>

*Students in certificate and/or Associate in Science degree programs may be able to substitute the following courses for the calculus requirement:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH C</td>
<td>Plane Trigonometry</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 1</td>
<td>Math Analysis</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 22</td>
<td>Elem Proby &amp; Stat</td>
<td>5.0</td>
</tr>
</tbody>
</table>

In addition, nine or more units from the following list of approved programs and/or subject areas are to be selected. See counselor or advisor for specific courses.

Accounting
Electrical Technology
Auto Mechanics
Industrial Technology
Drafting Technology
Computer Studies

Construction Crafts Technology
Machine Tool/Shop
Welding and Cutting
Surveying
Petroleum
Farm Mechanics
Mechanical Technology
GEOLOGY

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 wants to transfer.

**UCLA**

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 1a</td>
<td>4.0</td>
<td>MATH 6a</td>
<td>4.0</td>
</tr>
<tr>
<td>GEOL 1b</td>
<td>4.0</td>
<td>MATH 6b</td>
<td>4.0</td>
</tr>
<tr>
<td>GEOL 6a</td>
<td>2.0</td>
<td>PHYS 2a</td>
<td>4.0</td>
</tr>
<tr>
<td>GEOL 6b</td>
<td>2.0</td>
<td>PHYS 2b</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM 1a</td>
<td>5.0</td>
<td>BIOL 1a</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM 1b</td>
<td>5.0</td>
<td>BIOL 1b</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**SAN DIEGO STATE UNIVERSITY**

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 1a</td>
<td>4.0</td>
<td>GEOL 6a</td>
<td>2.0</td>
</tr>
<tr>
<td>GEOL 1b</td>
<td>2.0</td>
<td>GEOL 6b</td>
<td>2.0</td>
</tr>
<tr>
<td>GEOL 10</td>
<td>3.0</td>
<td>CHEM 1a</td>
<td>5.0</td>
</tr>
<tr>
<td>GEOL 10L</td>
<td>1.0</td>
<td>CHEM 1b</td>
<td>5.0</td>
</tr>
<tr>
<td>GEOL 1b</td>
<td>4.0</td>
<td>BIOL 11</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM</td>
<td>5.0</td>
<td>MATH 6a</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Recommended Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN DR 30a</td>
<td>3.0</td>
<td>MATH 6b</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**PHYSICS**

**ALL FOUR-YEAR COLLEGES AND UNIVERSITIES**

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 2a-2b or 4a-4c) 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>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 4a</td>
<td>Mech/Wave Motion</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS 4b</td>
<td>Heat, Elec/Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS 4c</td>
<td>Optics/Modn Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM 1a</td>
<td>General Chemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM 1b</td>
<td>Gen Chem/Chem Anal</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH 6a</td>
<td>Analyt Geom Calc I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH 6b</td>
<td>Analyt Geom Calc II</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH 6c</td>
<td>Calculus III</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH 6d</td>
<td>Ord Diff Equations</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 6e</td>
<td>Elem Linear Algebra</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### Recommended Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM S 10</td>
<td>Intr Prog w/PASCAL</td>
<td>3.0</td>
</tr>
<tr>
<td>COM S 18</td>
<td>Intr Prog w/FORT</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### ASSOCIATE IN SCIENCE DEGREE PROGRAMS

**ARCHITECTURAL DRAFTING**

Minimum units required in related disciplines – 35

### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 1</td>
<td>Intr Arch/Inter Des</td>
<td>1.0</td>
</tr>
<tr>
<td>ARCH 6</td>
<td>Materials of Constr</td>
<td>2.0</td>
</tr>
<tr>
<td>ARCH 10</td>
<td>Freehand Drawing</td>
<td>2.0</td>
</tr>
<tr>
<td>ARCH 11</td>
<td>Intr Drwng/Perspctv</td>
<td>4.0</td>
</tr>
<tr>
<td>ARCH 12</td>
<td>Basic Graphics</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 21</td>
<td>Fund Envir Dsgn</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 22</td>
<td>Fund Envir Dsgn II</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 23</td>
<td>Fund Envir Dsgn III</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 30</td>
<td>Architect Model Bldg</td>
<td>1.0</td>
</tr>
<tr>
<td>ARCH 31</td>
<td>Archit Practice I</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 32</td>
<td>Archit Practice II</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 18</td>
<td>Intro/CADD</td>
<td>1.0</td>
</tr>
<tr>
<td>PHYS 2a</td>
<td>Gen Mech/Heat</td>
<td>4.0</td>
</tr>
</tbody>
</table>
BAKERSFIELD COLLEGE

Recommended Courses

IN DR 20a Cmp Asst Drft/Dsgn 3.0  SOLAR 3  Passive Solar 3.0

Suggested Program

First Semester  UN  Second Semester  UN
ARCH 1 Intr Arch/Inter Des 1.0  ARCH 6 Materials of Constr 2.0
ARCH 10 Freehand Drawing 2.0  ARCH 12 Basic Graphics 3.0
ARCH 11 Intr Drwng/Perspctv 4.0  ARCH 21 Fund Envir Dsgn I 3.0
IN DR 18 Intro/CADD 1.0

Third Semester  UN  Fourth Semester  UN
ARCH 22 Fund Envir Dsgn II 3.0  ARCH 23 Fund Envir Dsgn III 3.0
ARCH 30 Architec Model Bldg 1.0  ARCH 32 Archit Practice II 3.0
ARCH 31 Archit Practice I 3.0  ARCH 33 Arch Comp Graphics 2.0

CHEMISTRY

Minimum units required in related disciplines – 31

Required Courses

CHEM 1a General Chemistry 5.0  MATH 1 Math Analysis 3.0
CHEM 1b Gen Chem/Chem Anal 5.0  OR
CHEM 8 Organic Chemistry 3.0  MATH 6a *Analyt Geom Calc I 4.0
CHEM 9 Organic Chem Lab 4.0  PHYS 4a *Mech/Wave Motion 4.0
BACT 2 *Bacteriol-Microbiol 4.0  PHYS 4b *Heat, Elec/Magntsm 4.0
OR  PHYS 4c *Optic/Modn Physcs 4.0
BIOL 1a Prin Animal Biology 4.0  OR
OR  PHYS 2a Gen Mech/Heat 4.0
BIOL 1b Plant Biology 4.0  PHYS 2b Gen SLEMMP 4.0
OR  COM S 5 Intro Prg w/BASIC 3.0
BIOL 11 Concepts of Biology 4.0  OR
OR  COM S 10 Intro Prg w/PASCAL 3.0
OR  COM S 18 Intr Prg w/FORT 3.0

*Recommended courses

Suggested Program

First Semester  UN  Second Semester  UN
CHEM 1a General Chemistry 5.0  CHEM 1b Gen Chem/Chem Anal 5.0
OR  PHYS 4a Mech/Wave Motion 4.0
PHYS 2a Gen Mech/Heat 4.0  PHYS 2b Gen SLEMMP 4.0
MATH 6a Analyt Geom Calc I 4.0  MATH 6a Analyt Geom Calc I 4.0
OR  MATH 6b Analyt Geom Calc II 4.0
MATH 1 Math Analysis 3.0
<table>
<thead>
<tr>
<th>Third Semester</th>
<th>UN</th>
<th>Fourth Semester</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 8 Elem Org Chemistry</td>
<td>3.0</td>
<td>PHYS 4c Optics/Modn Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM 9 Organic Chem Lab</td>
<td>3.0</td>
<td>BACT 2 Bacterio-Microbiol</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH 6c Calculus III</td>
<td>4.0</td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>PHYS 4b Heat, Elec/Magnsm</td>
<td>4.0</td>
<td>BIOL 1a Prin Animal Biology</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>BIOL 1b Plant Biology</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>BIOL 11 Concepts of Biology</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>COM S 5 Intro Prg w/BASIC</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>COM S 10 Intro Prg w/PASCAL</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>COM S 18 Intr Prg w/FORT</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**GEOLOGY**

Minimum units required in disciplines – 33

**Required Courses**

<table>
<thead>
<tr>
<th></th>
<th>UN</th>
<th></th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 1a</td>
<td>4.0</td>
<td>MATH D</td>
<td>4.0</td>
</tr>
<tr>
<td>GEOL 1b</td>
<td>4.0</td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>GEOL 15</td>
<td>3.0</td>
<td>COM S 5</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOL Electives</td>
<td>5.0</td>
<td>COM S 10</td>
<td>3.0</td>
</tr>
<tr>
<td>CHEM 1a</td>
<td>5.0</td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td>COM S 18</td>
<td>3.0</td>
</tr>
<tr>
<td>CHEM 2a</td>
<td>5.0</td>
<td>ENGR 1a</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 30a</td>
<td>3.0</td>
<td>PHYS 2a</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH C</td>
<td>3.0</td>
<td>Plane Trigonometry</td>
<td></td>
</tr>
</tbody>
</table>

**Suggested Program**

**First Semester**

<table>
<thead>
<tr>
<th></th>
<th>UN</th>
<th></th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN DR 30a</td>
<td>3.0</td>
<td>GEOL 1b</td>
<td>4.0</td>
</tr>
<tr>
<td>GEOL 1a</td>
<td>4.0</td>
<td>MATH C</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH D</td>
<td>4.0</td>
<td>Plane Trigonometry</td>
<td></td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th></th>
<th>UN</th>
<th></th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>GEOL 15</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PHYS 2a</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GEOL</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elective</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elective</td>
<td>2.30</td>
</tr>
</tbody>
</table>

**Suggested Electives**

<table>
<thead>
<tr>
<th></th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 3cd</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 58</td>
<td>3.0</td>
</tr>
</tbody>
</table>
**INDUSTRIAL DRAWING**

Minimum units required in related disciplines – 32

**Required Courses (without exception)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN DR 1</td>
<td>Intro to Drafting</td>
<td>0.5</td>
<td>ARCH 31</td>
<td>Archit Practice I</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 30a</td>
<td>Industrial Drawing</td>
<td>3.0</td>
<td>PHYS 2a</td>
<td>Gen Mech/Heat</td>
<td>4.0</td>
</tr>
<tr>
<td>IN DR 30b</td>
<td>Industrial Drawing</td>
<td>3.0</td>
<td>MATH D</td>
<td>Intermed Algebra</td>
<td>4.0</td>
</tr>
<tr>
<td>IN DR 30c</td>
<td>Adv Indust Drawing</td>
<td>3.0</td>
<td>MATH C</td>
<td>Plane Trigonometry</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 30d</td>
<td>Adv Indust Drawing</td>
<td>3.0</td>
<td>ENGR 1a</td>
<td>Plane Surveying</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 18</td>
<td>Intro/CADD</td>
<td>1.0</td>
<td>BUS A 18</td>
<td>Business Law</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 20a</td>
<td>Cmp Asst Drft/Dsgn</td>
<td>3.0</td>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN DR 53a</td>
<td>Petroleum Map Drftg</td>
<td>3.0</td>
<td>BUS A 20</td>
<td>Prin Busnss/Industry</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 50a</td>
<td>Process Piping Drft</td>
<td>4.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN DR 53b</td>
<td>Adv Petr Map Draft</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR 24</td>
<td>Grph/Dscrp Geom</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 20b</td>
<td>Cmp Asst Drft/Dsgn</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Suggested Program**

**First Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN DR 1</td>
<td>Intro to Drafting</td>
<td>0.5</td>
</tr>
<tr>
<td>IN DR 30a</td>
<td>Industrial Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 18</td>
<td>Intro/CADD</td>
<td>1.0</td>
</tr>
<tr>
<td>MATH D</td>
<td>Intermed Algebra</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN DR 30b</td>
<td>Industrial Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 20a</td>
<td>Cmp Asst Drft/Dsgn</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH C</td>
<td>Plane Trigonometry</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 50a</td>
<td>Process Piping Drft</td>
<td>4.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN DR 53a</td>
<td>Petroleum Map Drftg</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS A 18</td>
<td>Business Law</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Third Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 31</td>
<td>Archit Practice I</td>
<td>4.0</td>
</tr>
<tr>
<td>IN DR 30c</td>
<td>Adv Indust Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>IN DR 50a</td>
<td>Process Piping Drft</td>
<td>4.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN DR 53a</td>
<td>Petroleum Map Drftg</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYS 2a</td>
<td>Gen Mech/Heat</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGR 1a</td>
<td>Plane Surveying</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Fourth Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN DR 30d</td>
<td>Adv Indust Drawing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Drafting Electives**
COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: lect lecture; lab laboratory; demo demonstration; Repeat repeatability; CCS Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. NOTE: If repeatability is not shown, course may not be repeated.

ARCHITECTURE

ARCH 1  INTRODUCTION TO ARCHITECTURE AND INTERIOR DESIGN (1 unit)
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. Satisfies 0.5 unit counseling requirement for graduation from Bakersfield College. Prerequisite: Reading Level 1. Hours: (18) 1 lect. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

ARCH 6  MATERIALS OF CONSTRUCTION (2 units)
The use and application of building materials and the structural make-up of buildings. Prerequisite: Reading Level 1. Hours: (36) 2 lect. Field trips required. CCS: Occupational Education. Transferable: CSU and Private Colleges.

ARCH 10  FREEHAND DRAWING (2 units)
Exercises in drawing without mechanical aids. Prerequisite: Reading Level 1. Hours: (72) 1 lect, 3 lab. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

ARCH 11  INTRODUCTION TO DRAWING AND PERSPECTIVE (4 units)
Introduction to the basic skills used in graphic communication including orthographic and isometric projections, sections, mechanical perspectives and shade and shadows. Prerequisite: MATH B and two years of high school drafting or IN DR 30a. Reading Level 1. Hours: (144) 2 lect, 6 lab. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

ARCH 12  BASIC GRAPHICS (3 units)
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. Prerequisites: ARCH 10 and 11. Hours: (108) 2 lect, 4 lab. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

ARCH 21  ENVIRONMENTAL DESIGN FUNDAMENTALS I (3 units)
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. Prerequisite: ARCH 1 or evaluation by instructor. Hours: (108) 2 lect, 4 lab. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.
ARCH 22 ENVIRONMENTAL DESIGN FUNDAMENTALS II (3 units)
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. **Prerequisite:** ARCH 1, 10, 11, 12 and 21. **Hours:** (126) 1 lect, 6 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

ARCH 23 ENVIRONMENTAL DESIGN FUNDAMENTALS III (3 units)
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. **Prerequisite:** ARCH 22. **Hours:** (126) 1 lect, 6 lab. Field trip to Los Angeles required. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

ARCH 25 STRENGTH OF MATERIALS I (2 units)
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. **Prerequisites:** MATH 6a, PHYSC 4a. Reading Level 1. **Hours:** (36) 2 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

ARCH 26 STRENGTH OF MATERIALS II (2 units)
Introduction to properties of materials; derivations 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. **Prerequisite:** ARCH 25 (may be taken concurrently). Reading Level 1. **Hours:** (36) 2 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

ARCH 30 ARCHITECTURAL MODEL BUILDING (1 unit)
Develops techniques and methods required in constructing various types of structural and presentation models used in the architectural field. **Prerequisite:** Reading Level 1 and concurrent enrollment in ARCH 31. **Hours:** (54) 3 lect/lab. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

ARCH 31 ARCHITECTURAL PRACTICE I (3 units)
Introduction to construction techniques and working drawings. Theory and application of laws and codes affecting buildings. Working drawings as communication instruments. **Prerequisites:** ARCH 6 and concurrent enrollment in ARCH 30. **Hours:** (126) 2 lect, 4 lab. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.
ARCH 32 ARCHITECTURAL PRACTICE II (3 units)
Introduction to construction techniques and working drawings. Theory and application of laws and codes affecting buildings. Working drawings as communication instruments. **Prerequisite:** ARCH 31. **Hours:** (108) 2 lect, 4 lab. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

ARCH 33 ARCHITECTURAL COMPUTER GRAPHICS (2 units)
Computer graphic applications as they relate to the architectural working drawings and design technology utilizing Computer Assisted Drafting and Design (CADD) fundamentals. **Prerequisite:** IN DR 18, ARCH 31, or job related experience to be evaluated by the instructor. **Hours:** (72) 1 lect, 3 lab. Field trips required. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

ARCH 45 BUILDING CODES (3 units)
Study of the Uniform Building Codes, local codes and related ordinances. Fundamental structural concepts involved in code work, code interpretation and enforcement. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

ARCH 46 BUILDING AND RELATED CODES (3 units)
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. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

ASTRONOMY

ASTR 1 ELEMENTARY ASTRONOMY (3 units)
An introductory course dealing with the fundamental observations and scientific models of astronomy. Among topics included are the motions and properties of the sun, moon, earth, planets, stars, and galaxies, as well as the properties of electromagnetic radiation, astronomical instruments, and stellar and cosmic evolution. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

CHEMISTRY

The introductory courses in Chemistry (Chemistry 1a-1b, 2a or 11) and Physics (Physics 2a-2b or 4a-4c) 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, and pre-professional majors. These courses should be completed early in a student’s academic program sequence of study to ensure greater academic success in subsequent courses in the student’s field of interest and a more complete understanding of that field.
CHEM 1a  GENERAL CHEMISTRY (5 units)
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. Prerequisites: High school chemistry and algebra with grades of "B" or CHEM 2a with a grade of "C." Reading Level 1. Hours: (162) 3 lect, 6 lab. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. (CAN: CHEM 2.)

CHEM 1b  GENERAL CHEMISTRY AND CHEMICAL ANALYSIS (5 units)
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. Prerequisite: CHEM 1a with a grade of "C." Hours: (162) 3 lect, 6 lab. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. (CAN: CHEM 4.)

CHEM 2a  INTRODUCTORY GENERAL CHEMISTRY (5 units)
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. Prerequisite: MATH A or high school algebra. Reading Level 1. Hours: (162) 3 lect, 6 lab. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. Credit limitations. For specific information see counselor. Note: Not open to students with credit in CHEM 1a.

CHEM 8  ELEMENTARY ORGANIC CHEMISTRY (3 units)
A survey of organic compounds, all the fundamental organic functional groups, plus proteins, fats, carbohydrates, and representative types of organic chemical reactions. For students interested in chemical industries, medicine, dentistry, pharmacy, biology and related biological fields, engineering, medical terminology, and chiropractic. Prerequisite: CHEM 1a. Must take CHEM 9 (Organic Chem lab) concurrently. Students who have completed CHEM 2a with a minimum grade of "B," and who need only one semester of organic chemistry to complete chemistry requirements, may enroll with prior evaluation by instructor. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

CHEM 9  ORGANIC CHEMISTRY LABORATORY (3 units)
A lab course in organic chemistry covering the fundamental laboratory techniques in organic chemistry. Also covered are aliphatic synthesis, separations and instrumental identification techniques. Prerequisite: CHEM 8 must be taken concurrently. (Note: Students who have taken CHEM 8 prior to 1987 may enroll.) Hours: (108) 5 lab, 1 disc. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.
CHEM 11  PRINCIPLES OF INORGANIC, ORGANIC AND BIOCHEMISTRY (5 units)
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. **Prerequisite:** MATH A or equivalent. Reading Level 1. **Hours:** (162) 3 lect, 6 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. Credit limitations. For specific information see counselor.

CHEM 202  LEARNING SKILLS IN CHEMISTRY (0.5—4 units. Limit 4 units.)
Provides the opportunity for additional laboratory, project and/or supervised problem solving work for chemistry students. **Prerequisite:** Concurrent enrollment in a chemistry course or PHYS 21. **Hours:** (9-72) 18 lab, problem solving, or project work per unit. **Repeat:** 3, or until a limit of 4 units is reached. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

ENGINEERING

ENGR 1a  PLANE SURVEYING (3 units)
Principles of measurement of distances, directions, and elevations. Care and use of surveying instruments; methods of plane and geometric surveys; field practices, calculations and mapping; trigonometric leveling. **Prerequisite:** MATH C and one year of high school mechanical drawing or IN DR 30a. Reading Level 1. **Hours:** (84) 2 lect, 8 six-hour lab sessions. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

ENGR 1b  ADVANCED PLANE SURVEYING (3 units)
Principles of plane and geometric surveys, field practices, calculations, mapping, topographic surveys, plane table surveys and public land surveys. **Prerequisite:** ENGR 1a or evaluation by instructor. **Hours:** (84) 2 lect, 8 six-hour lab sessions. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

ENGR 17  INTRODUCTION TO ELECTRICAL CIRCUITS (3 units)
Principles and techniques of D.C. and A.C. circuit analysis, including Kirchoff's laws, mesh and nodal analysis, Thevnen's and Norton's theorems, impedance, phasors, frequency response, power calculations, natural and forced responses, analog building blocks, operational amplifiers, and digital building blocks. **Prerequisite:** MATH 6c and PHYSC 4b. Concurrent enrollment in MATH 6d recommended. **Hours:** (72) 3 lect/disc. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

ENGR 19f/19p  COMPUTER PROGRAMMING FOR SCIENCE, ENGINEERING AND TECHNOLOGY (4 units)
19f-19p (3—3) equivalent to 19fp
Methods used in the solution of science and engineering problems on digital computers. Programming of algorithms for solutions of numerical problems using a higher level language. PASCAL is the language used in ENGR 19p, recommended for computer science or electrical engineering majors. FORTRAN 77 is the language used in
ENGR 19f recommended for other majors. **Prerequisite:** Reading Level 1, MATH 6a or TEC M 53c (may be taken concurrently). **Hours:** (90-108) 3 units: 2 lect, 3 lab; 4 units: 3 lect, 3 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. **Note:** Not open to students with credit in COM S 19f/19p.

**ENGR 24 ENGINEERING GRAPHICS AND DESCRIPTIVE GEOMETRY (3 units)**
Sketching, orthographic projection, isometric and oblique drawing, graphic computation, and empirical equations. Point, line, and plane solutions, intersections, developments, and graphic calculus with emphasis upon the application of these principles to various engineering problems. Introduction to computer aided drafting and design. **Prerequisite:** One year of high school mechanical drawing or IN DR 30a and MATH C or higher. Reading Level 1. **Hours:** (126) 1 lect, 6 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

**ENGR 36 ENGINEERING MECHANICS – STATICS (3 units)**
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. **Prerequisites:** PHYSC 4a and MATH 6a. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

**ENGR 45 PROPERTIES OF MATERIALS (3 units)**
Internal structure of engineering materials. Characteristics of single and multiple phase metals; polymer, ceramics 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, and polymers. **Prerequisites:** CHEM 1a and PHYSC 4a, MATH C or CHEM 2a and PHYSC 2ab. **Hours:** (90) 2 lect, 3 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

**ENGR 48 ENGINEERING ORIENTATION (1 unit)**
The student will gain a general knowledge of the engineering profession and what it takes to become an engineer or technologist. All of the branches of engineering will be discussed and students will be assisted in understanding college requirements and in making educational plans. Satisfies 0.5 unit counseling requirement for graduation from Bakersfield College. **Prerequisite:** Reading Level 1 and MATH A recommended. **Hours:** (18) 2 lect for 9 weeks. Field trips required. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

**ENGR 49 ENGINEERING ANALYSIS AND DESIGN (1 unit)**
Introduction to the engineering design process and to the mathematical, scientific, and computational skills required to solve engineering problems. Students will design and construct a project. **Prerequisite:** Prior completion or concurrent enrollment in MATH 6a. Prior completion of ENGR 48 is highly recommended. Reading Level 1. **Hours:** (18) 2 lect for 9 weeks. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.
ENGR 50 ENERGY MANAGEMENT ENGINEERING (3 units)
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 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. Prerequisite: Some technical, scientific, or engineering background is recommended. Reading Level 1. Hours: (54) 3 lect. CCS: Occupational Education. Transferable: CSU and Private Colleges.

GEOGRAPHY

GEOG 1 INTRODUCTION TO GEOGRAPHY: PHYSICAL ELEMENTS (3 units)
A study of the basic elements of physical geography; climate, land forms, soils, natural vegetation and their patterns of world distribution. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

GEOG 1L PHYSICAL GEOGRAPHY LABORATORY (1 unit)
Laboratory assignments designed to accompany GEOG 1 lectures. Maps and mapping, location analysis, earth-sun relationship, weather and climate statistical and regional analysis, topographic maps and landform building processes. Emphasis on spatial relationships of physical environmental elements. Prerequisite: GEOG 1 (may be taken concurrently). Reading Level 1. Hours: (54) 2 lab, 1 quiz/demonstration. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

GEOLOGY

GEOL 1a PHYSICAL GEOLOGY (4 units)
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. Prerequisite: Reading Level 1. Hours: (108) 3 lect, 3 lab. At least 1 Saturday field trip or equivalent required. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. Note: Not open to students with credit in GEOL 10 and 10L.

GEOL 1b HISTORICAL GEOLOGY (4 units)
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. Laboratory work includes the use of geological maps, problems in structure and stratigraphy, the use and recognition of some common invertebrate fossils, and regional studies of the geologic history of the United States. Prerequisites: GEOL 1a or 10 and 10L. Hours: (108) 3 lect, 3 lab. Field trips required. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.
GEOL 6a INTRODUCTION TO MINERALOGY (2 units)
Determination of important minerals, their origins and relationships by physical and chemical tests. Prerequisite: GEOL 1a or 10 and 10L, CHEM 2a or equivalent. Hours: (72) 1 lect, 3 lab. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

GEOL 6b CRYSTALLOGRAPHY (2 units)
Study of the silicate minerals and recognition of the more important forms of the different crystal systems using Dana models and suitable crystal specimens. Prerequisite: GEOL 6a. Hours: (72) 1 lect, 3 lab. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

GEOL 7 GENERAL PALEONTOLOGY (3 units)
Covers the development of animal life from the earliest fossil records to present. Prerequisite: GEOL 1a, GEOL 10. One course in biological science is strongly recommended. Hours: (72) 2 lect, 2 lab. At least two Saturday field trips required. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

GEOL 10 INTRODUCTION TO GEOLOGY (3 units)
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. Designed for students not majoring in physical sciences or engineering. Prerequisite: Reading Level 1. Hours: (54) 3 lect. At least one Saturday field trip or equivalent required. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor. Note: Not open to students with credit in GEOL 1a.

GEOL 10L INTRODUCTORY GEOLOGY LABORATORY (1 unit)
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. Prerequisite: GEOL 10 (preferably taken concurrently). Reading Level 1. Hours: (54) 3 lab. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

GEOL 12 GEOLOGY OF CALIFORNIA (3 units)
An elementary course dealing with the geologic history, structure, topography and mineral resources of California and adjoining areas. Prerequisite: GEOL 1a or 10. Hours: (54) 3 lect. One field trip or equivalent required. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.
GEOL 15  INTRODUCTION TO PETROLEUM GEOLOGY (3 units)
Basic elements of geology, origin of petroleum, migration and entrapment of petroleum, methods of petroleum exploration, formation evaluation, drilling and production and economics. **Prerequisite:** GEOL 1a, or 10, or 12, or evaluation by instructor. **Hours:** (54) 3 lect/discussion. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges.

### INDUSTRIAL DRAWING

**IN DR 1  INTRODUCTION TO DRAFTING (0.5 units)**
Designed to assist students in understanding college requirements and to help them in making educational plans. It also provides information pertaining to drafting as both a career choice and the options open for transfer to a four-year school. Satisfies 0.5 units of counseling requirement for graduation from Bakersfield College. **Prerequisite:** Reading Level 1. **Hours:** (9) 1 lect for 9 weeks. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

**IN DR 18  INTRODUCTION TO COMPUTER ASSISTED DRAFTING AND DESIGN (CADD) (1 unit)**
An introductory course 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 building introductory skills which are necessary to function in a high technology field as a CADD operator. **Prerequisite:** Reading Level 1. **Hours:** (36) 4 lect/lab for 9 weeks. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

**IN DR 20a  COMPUTER ASSISTED DRAFTING AND DESIGN (CADD) (3 units)**
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. **Prerequisites:** IN DR 18, 30a and concurrent enrollment in IN DR 30b or ARCH 11, or ENGR 24, or equivalent courses or experience to be evaluated by the instructor. Reading Level 1. **Hours:** (108) 2 lect, 4 lab. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

**IN DR 20b  COMPUTER ASSISTED DRAFTING AND DESIGN (CADD) (3 units)**
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. **Prerequisite:** IN DR 20a. **Hours:** (108) 2 lect, 4 lab. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.
IN DR 30a – 30b  INDUSTRIAL DRAWING (3 – 3 units)
Fundamentals, techniques, procedures, and practices of industrial drafting and design based upon the American National Standard Drafting Manual of the American National Standards Institute, which includes lettering; basic theory of orthographic projection; freehand detail sketching; use of drafting instruments and equipment; solving multi-view problems; correct line use; sectioning; auxiliary views; pictorial sketching and drawing; revolutions; dimensioning practices; shop processes; fasteners; springs and threads; inking; graphs; and general drawing presentation. Prerequisite: 30a: Reading Level 1. 30b: IN DR 30a or two years of high school drafting with grades of “B.” Students receiving failing grades in IN DR 30a must repeat IN DR 30a with a passing grade before continuing onto any other class in the drafting sequence. This takes precedence over any other statements of eligibility for advanced drafting courses. Hours: (108-108) 2 lect, 4 lab. CCS: Occupational Education. Transferable: CSU and Private Colleges.

IN DR 30c – 30d  ADVANCED INDUSTRIAL DRAWING (3 – 3 units)
Continues use of fundamentals in drafting from the American National Standard Drafting Manual. The projects are of an advanced nature and present drawing and design problems which must be solved in a creative manner. Uses all of the basic drafting practices reviewed in IN DR 30a and 30b. Prerequisite: 30c: IN DR 30b; 30d: IN DR 30c. Hours: (108-108) 2 lect, 4 lab. CCS: Occupational Education. Transferable: CSU and Private Colleges.

IN DR 50a  PROCESS PIPING DRAFTING (4 units)
Develops knowledge of essential techniques of process piping drafting. Serves as a phase of training to become piping draftsmen. Includes piping plans, isometrics, orthographics, and process flow diagrams. Prerequisite: IN DR 30a. Hours: (108) 3 lect, 3 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

IN DR 50b  PROCESS PIPING DRAFTING (4 units)
Develops a working knowledge of essential layout techniques of process piping drafting. Serves as an additional phase of training for those wishing to continue and expand their knowledge of process piping drafting. Content ranges from piping specifications, plot development, equipment layout, instrumentation and includes simple piping flexibility studies. Prerequisite: IN DR 50a. Hours: (108) 3 lect, 3 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

IN DR 51  ELECTRICAL DESIGN I (2.5 units)
Introduces the student to the drawing and drafting techniques used in the preparation of electrical construction drawings in industry today. Emphasizes concepts of design to the student utilizing various national, state, and local rules and codes (e.g. 1987 National Electrical Code). Prerequisite: Reading Level 1, IN DR 30a or two years of high school drafting with a grade of “B,” or ELE T 54a. IN DR 18 recommended. Hours: (72) 2 lect, 2 lab. Field trips required. CCS: Occupational Education. Not Transferable: Associate Degree only.
IN DR 53a  PETROLEUM MAP DRAFTING (3 units)
Develops skills to enable the beginning draftsman to become familiar with different types of map drafting. Includes base maps, contour maps, isopach maps, parcel maps, air maps, cross-sections, and introduction to electric logs. Prerequisite: IN DR 30a or equivalent. Hours: (54) 3 lect. Field trip required. CCS: Occupational Education. Not Transferable: Associate Degree only.

IN DR 53b  ADVANCED PETROLEUM MAP DRAFTING (3 units)
An advanced course in petroleum map drafting covering topics not taught in IN DR 53a. Includes care of equipment, air brush coloring, cross sections, specialized map construction, graphs, charts and visual aids, and computer graphics. Prerequisite: IN DR 53a or equivalent. Hours: (54) 3 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

METEOROLOGY

METRO 3  INTRODUCTION TO METEOROLOGY (3 units)
An introductory course in the physical processes of weather phenomena. Designed to give 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. Prerequisite: Reading Level 1. Hours: (54) 3 lect. Field trips required. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

PHYSICAL SCIENCE

PHY S 10  COLLEGE PHYSICAL SCIENCE (3 units)
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. Emphasizes basic concepts, relationships, principles and application to modern daily life. Topics are developed with a minimum of mathematical presentation. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor. Note: Not open to science majors.

PHY S 11  GENERAL PHYSICAL SCIENCE (4 units)
Designed for all non-science students and education majors. A survey of the basic physical phenomena of mechanics, heat, light, sound, electricity, chemistry, geology, meteorology and astronomy. Emphasizes basic principles, relationships, status and applications to modern civilization. Topics are developed with a minimum of mathematical presentation. Prerequisite: Reading Level 1. Hours: (108) 3 lect/demo, 3 lab. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor. Note: Not open to science majors.
PHY S 21  SPECIAL PROJECTS
IN PHYSICAL SCIENCE (1-3 units. Limit 3 units.)
Individual directed work in a science, engineering or drawing 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. Prerequisites: Completion of a basic course in science,
engineering, or drafting with a minimum grade of "C" and evaluation by instructor.
Reading Level 1. Hours: (54) 3 directed study/unit. Repeat: 2, or until a limit of 3
units is reached. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private
Colleges. UC credit limitations. For specific information see counselor.

PHY S 35a  ROCKS AND MINERALS (1 unit)
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 recog­
nize their relationships as components of the various classes of rocks. From the identifi­
cation 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. Prerequisite: Reading Level 1. Hours: (18) 18 lect/lab/field trip and pro­
jects. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

PHY S 35e  CUP AND SAUCER CHEMISTRY (1 unit)
An inexpensive approach to studying chemical happenings with a special emphasis on
teaching at the elementary school level. Emphasizes a "hands on" approach to doing
and developing chemical happenings that may later be used and extended by the ele­
mentary school teacher. Prerequisite: Reading Level 1. Hours: (18) 18 lect/discus­
sion. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

PHY S 35f  METRIC SYSTEM (1 unit)
A study of the metric system with special emphasis for elementary school classroom
teachers. Includes measuring, unit conversion, system conversions and familiarity with
derived quantities. Prerequisite: Reading Level 1. Hours: (18) 18 lect. CCS: Liberal
Arts and Sciences. Transferable: CSU and Private Colleges.

PHYSICS
The introductory courses in Physics (Physics 2a-2b or 4a-4c) and Chemistry
(Chemistry 2a-2b, 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 ensure greater
academic success in subsequent courses in the student's field of interest and a more
complete understanding of that field.
PHYSC 2a  GENERAL PHYSICS — MECHANICS AND HEAT (4 units)
The properties of matter, mechanics and heat. Emphasizes understanding laws, principles, and theories. Required for most science, pre-medical, most other pre-professional and technical majors. **Prerequisites:** MATH C (may be taken concurrently) and MATH D. Reading Level 1. **Hours:** (126) 4 lect, 3 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

PHYSC 2b  GENERAL PHYSICS — SOUND, LIGHT, ELECTRICITY, MAGNETISM, MODERN PHYSICS (4 units)
The properties of waves, sound, light, electricity, magnetism, atomic and nuclear physics. Emphasizes understanding laws, principles and theories. Required for most science, pre-medical, most other pre-professional and technical majors. **Prerequisites:** PHYSC 2a, 11a, or high school physics with a "C," MATH C, D. **Hours:** (126) 4 lect, 3 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

PHYSC 4a  MECHANICS AND WAVE MOTION (4 units)
The first in a sequence of three semester courses required of physics, engineering, and other majors requiring a thorough physics background. Includes vectors, kinematics, dynamics, momentum, energy, rotation, gravitation, oscillations, fluids, and wave motion. **Prerequisites:** MATH 6a and Reading Level 1. **Hours:** (126) 3 lect, 1 disc, 3 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

PHYSC 4b  HEAT, ELECTRICITY, AND MAGNETISM (4 units)
The fundamental concepts and phenomena of heat and electricity and magnetism, including temperature, thermodynamics, kinetic theory of gases, electric charge, electric field, electric potential, capacitance, dielectrics, direct and alternating current circuits, magnetic field, magnetic force, electromagnetic induction, magnetic properties of matter, Maxwell's equations, electromagnetic oscillations and electromagnetic waves. **Prerequisites:** PHYSC 4a, MATH 6b, and concurrent enrollment in MATH 6c. **Hours:** (126) 3 lect, 1 disc, 3 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

PHYSC 4c  OPTICS AND MODERN PHYSICS (4 units)
An intensive study of optics and a thorough introduction to the physics of the 20th century. Topics include the nature and propagation of light, reflection, refraction, polarization, diffraction, optical instruments, special relativity, quantum theory, atomic and nuclear physics, statistical distribution functions, and electrical conduction and other properties of solids. **Prerequisite:** PHYSC 4b. **Hours:** (126) 3 lect, 1 disc, 3 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.
WATER TECHNOLOGY

WTR T 51  BASIC WATER TREATMENT (3 units)
Prepares 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 domestic drinking water. Prerequisite: None. Hours: (54) 3 lect. Field trips required. CCS: Occupational Education. Not Transferable: Associate Degree only.

WTR T 52  BASIC WATER DISTRIBUTION (3 units)
Prepares 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. Prerequisite: None. Hours: (54) 3 lect. Field trips required. CCS: Occupational Education. Not Transferable: Associate Degree only.

WTR T 53  WATER AND WASTEWATER ANALYSIS (4 units)
Prepares the student for certification as a Water Quality Analyst, Grade 1. Lectures cover environmental influences, composition of natural water, analysis, interpretation of results and application to treatment problems. Laboratory experiments include those areas which are on the Grade 1 exam, and which are usually the controlling operating tests for water and wastewater treatment plants. Prerequisite: High school CHEM or job related experience. Reading Level 1. Hours: (108) 3 lect, 3 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.
Programs in the Public Service Department are designed to provide education and training in public safety and service, law enforcement and criminal justice, firefighting and related operations. Both theoretical and practical courses are offered.

Course Repeat Policy: Many inservice courses allow repeated enrollment. Students should be aware that repeatability policies allow a course repeat when either: (1) a less than satisfactory grade was earned, or (2) course content has changed significantly since the previous enrollment. For purposes of this section, course repeats to acquire new content will be approved if two (2) or more years have passed since the previous enrollment.

Bakersfield College’s Kern County Regional Criminal Justice Training Center provides a professional basic law enforcement academy in accordance with Peace Officer Standards and Training (P.O.S.T.) guidelines. KCRCJTC cooperates with local law enforcement agencies for provision of mandated training.

Bakersfield College’s Regional Fire Technology Academy (RFTA) was authorized by the California Fire Service Training and Education System (CFSTES) in 1980, with programs of study leading to Certified Fire Officer, Certified Chief Officer and Certified Fire Chief. RFTA sponsors many cooperative training programs with state and local fire protection agencies.

Individuals may develop a program suitable to their career goals with the aid of a college counselor. Courses may lead to the achievement of specific career goals, immediate employment, an Associate Degree, or transfer credits that satisfy requirements for a Bachelor’s Degree in Criminology, Police Science, Correctional Administration or Fire Technology.

KERN COUNTY REGIONAL CRIMINAL JUSTICE LAW ENFORCEMENT ACADEMIES

BASIC POLICE ACADEMY

The Basic Police Academy prepares individuals for employment in law enforcement. The curriculum includes academic subjects; firearms, defensive driving, physical and defensive tactics training; and scenario experience. The student enrolls in a rigorous 632-hour, 17½-week program that meets mandated Peace Officer Standards and Training (P.O.S.T.) certification requirements recognized by state and local agencies and Title V standards.
RESERVE ACADEMY

The Reserve Law Enforcement Officer Academy is a 3-part, 328-hour curriculum that allows individuals to achieve mandated qualifications to serve as Reserve Officers with local law enforcement agencies. Module A/B (184 hours) includes knowledge and skills for service as a backup officer. Module C (144 hours) completes the essential training necessary for service as a solo officer with full peace officer status.

CERTIFICATES OF ACHIEVEMENT

FIRE TECHNOLOGY CERTIFICATE

Minimum units required in discipline — 30

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI TC 1</td>
<td>3.0</td>
<td>ENGL 60</td>
<td>4.0</td>
</tr>
<tr>
<td>FI TC 2</td>
<td>3.0</td>
<td>PSYCH (Psych 51 or 1a)</td>
<td>3.0</td>
</tr>
<tr>
<td>FI TC 3</td>
<td>3.0</td>
<td>SPCH 1a</td>
<td>3.0</td>
</tr>
<tr>
<td>FI TC 4</td>
<td>3.0</td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>FI TC 5</td>
<td>3.0</td>
<td>SPCH 51</td>
<td>3.0</td>
</tr>
<tr>
<td>FI TC 6</td>
<td>3.0</td>
<td>EMT 1</td>
<td>4.0</td>
</tr>
<tr>
<td>FI TC 7</td>
<td>3.0</td>
<td>Emer Med Non Ambul</td>
<td>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 must 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.

AREAS OF SPECIALIZATION

HAZARDOUS MATERIALS

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI TC 70a</td>
<td>0.5</td>
</tr>
</tbody>
</table>

(C.F.T.E.S. Certification)

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI TC 70b</td>
<td>2.0</td>
<td>FI TC 70d</td>
<td>2.0</td>
</tr>
<tr>
<td>FI TC 70c</td>
<td>2.0</td>
<td>FI TC 70e</td>
<td>2.0</td>
</tr>
</tbody>
</table>

WILDLAND FIRE CONTROL

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI TC 71a</td>
<td>2.0</td>
<td>FI TC 71d</td>
<td>1.5</td>
</tr>
<tr>
<td>FI TC 71b</td>
<td>1.0</td>
<td>FI TC 71e</td>
<td>2.0</td>
</tr>
<tr>
<td>FI TC 71c</td>
<td>2.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
BAKERSFIELD COLLEGE

RESCUE AND LIFE SAFETY

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
<th>Units</th>
<th>Course Code</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI TC 72a</td>
<td>Heavy Duty Rescue 1</td>
<td>1.0</td>
<td>FI TC 72e</td>
<td>Adv. Swift Water Rescue</td>
<td>1.0</td>
</tr>
<tr>
<td>FI TC 72b</td>
<td>Heavy Duty Rescue 2</td>
<td>1.0</td>
<td>FI TC 72f</td>
<td>Auto Extrication</td>
<td>1.0</td>
</tr>
<tr>
<td>FI TC 72c</td>
<td>Heavy Duty Rescue 3</td>
<td>1.0</td>
<td>FI TC 72g</td>
<td>Aircraft Rescue Proc</td>
<td>1.0</td>
</tr>
<tr>
<td>FI TC 72d</td>
<td>Swift Water Rescue</td>
<td>1.5</td>
<td>FI TC 72h</td>
<td>EMT 1-NA Recert</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SPECIALIZED TRAINING PROGRAMS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
<th>Units</th>
<th>Course Code</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI TC 73</td>
<td>Incident Command Sys</td>
<td>0.5</td>
<td>FI TC 78</td>
<td>Adv. Officer Trng</td>
<td>2.0</td>
</tr>
<tr>
<td>FI TC 74</td>
<td>Petroleum Fire Proc</td>
<td>1.0</td>
<td>FI TC 79</td>
<td>Instr Orientation</td>
<td>2.0</td>
</tr>
<tr>
<td>FI TC 75</td>
<td>Fire Fighting Tech</td>
<td>2.0</td>
<td>FI TC 80</td>
<td>Emer Response Trng</td>
<td>0.0</td>
</tr>
<tr>
<td>FI TC 76</td>
<td>Fire Fighting Skills/Maint</td>
<td>3.0</td>
<td>FI TC 81</td>
<td>Orient Fire Technol</td>
<td>1.0</td>
</tr>
<tr>
<td>FI TC 77</td>
<td>Structure Fire Trng</td>
<td>2.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FIRE OFFICER CERTIFICATION (NFPA STANDARD 1021)

Minimum units required in discipline — 16

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
<th>Units</th>
<th>Course Code</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI TC 51a</td>
<td>Fire Management 1a</td>
<td>2.0</td>
<td>FI TC 51e</td>
<td>Fire Prevention Officer 1b</td>
<td>2.0</td>
</tr>
<tr>
<td>FI TC 51b</td>
<td>Fire Command 1a</td>
<td>2.0</td>
<td>FI TC 51f</td>
<td>Fire Investigation 1</td>
<td>2.0</td>
</tr>
<tr>
<td>FI TC 51c</td>
<td>Fire Command 1b</td>
<td>2.0</td>
<td>FI TC 51g</td>
<td>Fire Instructor 1a</td>
<td>2.0</td>
</tr>
<tr>
<td>FI TC 51d</td>
<td>Fire Prevention Officer 1a</td>
<td>2.0</td>
<td>FI TC 51h</td>
<td>Fire Instructor 1b</td>
<td>2.0</td>
</tr>
</tbody>
</table>

CHIEF OFFICER CERTIFICATION (NFPA STANDARD 1021)

Minimum units required in discipline — 22

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
<th>Units</th>
<th>Course Code</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI TC 50a</td>
<td>Communications/Comm Fire</td>
<td>2.0</td>
<td>FI TC 50f</td>
<td>Organ Dev/Human Rel</td>
<td>2.0</td>
</tr>
<tr>
<td>FI TC 50b</td>
<td>Scene Mgt/Mir Incid</td>
<td>2.0</td>
<td>FI TC 50g</td>
<td>Fire Bus Mgt/Chief Off</td>
<td>2.0</td>
</tr>
<tr>
<td>FI TC 50c</td>
<td>H/Rise Fire Tactics</td>
<td>2.0</td>
<td>FI TC 50h</td>
<td>Computr Ap/Fire Suc</td>
<td>2.0</td>
</tr>
<tr>
<td>FI TC 50d</td>
<td>Mngng Lg/Scl Disast</td>
<td>2.0</td>
<td>FI TC 50i</td>
<td>Master Planning</td>
<td>2.0</td>
</tr>
<tr>
<td>FI TC 50e</td>
<td>Wildland Fire Tactics</td>
<td>2.0</td>
<td>FI TC 50j</td>
<td>Staff Asgn/Ln Funct</td>
<td>2.0</td>
</tr>
<tr>
<td>FI TC 75</td>
<td>Drivr/Operatr (86-87)</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DRIVER/OPERATOR CERTIFICATION

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI TC 62</td>
<td>Firefighter I Academy</td>
<td>8.0</td>
</tr>
<tr>
<td>FI TC 61</td>
<td>Pre-Fire Trng</td>
<td>3.0</td>
</tr>
</tbody>
</table>
ASSOCIATE IN 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 in Arts Degree, and/or Baccalaureate Degree.

Minimum units required in discipline – 18

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADM J 1</td>
<td>Intro Admin Justice</td>
<td>3.0</td>
</tr>
<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>
</tbody>
</table>

OR completion of 18 units in ADM J 68—Peace Officer’s Basic Training.

Recommended for Associate Degree

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADM J 11</td>
<td>Juvenile Procedure</td>
<td>3.0</td>
</tr>
<tr>
<td>ADM J 12</td>
<td>Probl Phys Evidence</td>
<td>3.0</td>
</tr>
<tr>
<td>ADM J 13</td>
<td>Criminal Investig</td>
<td>3.0</td>
</tr>
<tr>
<td>ADM J 14</td>
<td>Patrol Procedures</td>
<td>3.0</td>
</tr>
<tr>
<td>ADM J 15</td>
<td>Arrst, Srch/Seizure</td>
<td>3.0</td>
</tr>
<tr>
<td>ADM J 16</td>
<td>Superv/Leadership</td>
<td>3.0</td>
</tr>
<tr>
<td>ADM J 17</td>
<td>Traffic Control</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Recommended for CSUC

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADM J 11</td>
<td>Juvenile Procedure</td>
<td>3.0</td>
</tr>
<tr>
<td>ADM J 12</td>
<td>Probl Phys Evidence</td>
<td>3.0</td>
</tr>
<tr>
<td>ADM J 13</td>
<td>Criminal Investig</td>
<td>3.0</td>
</tr>
<tr>
<td>ADM J 14</td>
<td>Patrol Procedures</td>
<td>3.0</td>
</tr>
<tr>
<td>ADM J 17</td>
<td>Traffic Control</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYCH 1a</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 1</td>
<td>Intro Sociology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 7</td>
<td>Juvenile Delinquency</td>
<td>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 professionals subscribe 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 in discipline – 18

Required Courses

<table>
<thead>
<tr>
<th>UN</th>
<th>Course Description</th>
<th>UN</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COR A 1</td>
<td>Instr Corrctnl Admin 3.0</td>
<td>COR A 4</td>
<td>Fund Probation Parole 3.0</td>
</tr>
<tr>
<td>COR A 2</td>
<td>Instit Sup/Offender 3.0</td>
<td>COR A 7</td>
<td>Juvenile Delinquency 3.0</td>
</tr>
<tr>
<td>COR A 3</td>
<td>Fund Intvwng ConsLng 3.0</td>
<td></td>
<td>SOC or PSYCH 3.0</td>
</tr>
</tbody>
</table>

Suggested Courses

<table>
<thead>
<tr>
<th>UN</th>
<th>Course Description</th>
<th>UN</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADM J 2</td>
<td>Criminal Law 3.0</td>
<td>ADM J 4</td>
<td>The Justice System 3.0</td>
</tr>
<tr>
<td>ADM J 3</td>
<td>Criminal Evidence 3.0</td>
<td>ADM J 13</td>
<td>Criminal Investig 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 units required in discipline – 18

Required Courses

<table>
<thead>
<tr>
<th>UN</th>
<th>Course Description</th>
<th>UN</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI TC 1</td>
<td>Intr to Fire Technology 3.0</td>
<td>FI TC 4</td>
<td>Fund Fire Behavior Control 3.0</td>
</tr>
<tr>
<td>FI TC 2</td>
<td>Pers/Sfty/Emrg Actn 3.0</td>
<td>FI TC 5</td>
<td>Fund Fire Prevention 3.0</td>
</tr>
<tr>
<td>FI TC 3</td>
<td>Fund Fire Protection 3.0</td>
<td>FI TC 6</td>
<td>Fire Pro Eqpmnt Syst 3.0</td>
</tr>
</tbody>
</table>

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: lect lecture; lab laboratory; demo demonstration; Repeat repeatability; CCS Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. NOTE: If repeatability is not shown, course may not be repeated.
PUBLIC SERVICE 359

ADMINISTRATION OF JUSTICE

ADM J 1  INTRODUCTION TO ADMINISTRATION OF JUSTICE (3 units)
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. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

ADM J 2  CONCEPTS OF CRIMINAL LAW (3 units)
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. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

ADM J 3  LEGAL ASPECTS OF EVIDENCE (3 units)
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. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges. Credit limitations. For specific information see counselor.

ADM J 4  THE JUSTICE SYSTEM (3 units)
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. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges. Credit limitations. For specific information see counselor.

ADM J 5  COMMUNITY RELATIONS (3 units)
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. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

ADM J 11 JUVENILE PROCEDURES (3 units)
The organization, functions and jurisdiction of juvenile agencies; the processing and detention of juveniles; juvenile case disposition; juvenile statutes and court procedures. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Occupational Education. Transferable: CSU and Private Colleges.
ADM J 12 PROBLEMS OF PHYSICAL EVIDENCE (3 units)
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. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect and assigned field trips. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

ADM J 13 CRIMINAL INVESTIGATION (3 units)
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. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

ADM J 14 PATROL PROCEDURES (3 units)
Responsibilities, techniques and methods of police patrol. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

ADM J 15 ARREST, SEARCH AND SEIZURE (3 units)
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. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

ADM J 16 SUPERVISION AND LEADERSHIP (3 units)
A consideration of the basic principles of supervision designed to develop future leaders in law enforcement. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

ADM J 17 TRAFFIC CONTROL (3 units)
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. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect/discussion. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

ADM J 18 BEHAVIORAL CONCEPTS FOR POLICE OFFICERS (3 units)
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. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

**ADM J 50** **INTRODUCTION TO ORGANIZED CRIME (3 units)**
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. **Prerequisite:** None. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ADM J 53** **INDUSTRIAL SECURITY (3 units)**
Philosophy and history of industrial security services. Survey of contemporary industrial practices; protection of facilities, risk reduction and safety practices. Security employee responsibilities. **Prerequisite:** None. **Hours:** (54) 3 lect/discussion. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ADM J 55a–55b–55c–55d** **CAMPUS POLICE (1–1–1–1 unit)**
Develops 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. **Prerequisite:** ADM J Major; concurrent enrollment or satisfactory completion of ADM J 1; grade point average of 2.0. **Hours:** (18 each) 1 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ADM J 56** **ADVANCED CRIMINAL INVESTIGATION (3 units)**
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. **Prerequisite:** None. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ADM J 58a** **POLICE ADMINISTRATION (3 units)**
The organization and management of patrol, traffic, detective, juvenile and vice units; formulation of policy and procedure; rules and regulations; deployment; implementations of procedural and tactical planning; coordination of activity. **Prerequisite:** None. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ADM J 58b** **POLICE ADMINISTRATION (3 units)**
Examination of current problems and trends in police organization and management, planning and research, fiscal problems, administration of a comprehensive personnel program. **Prerequisite:** None. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
ADM J 58c  SUPERVISION COURSE (P.O.S.T.) (4 units)
Basic concepts of police supervision and management. Emphasizes skills, knowledge, 
and development of self-confidence and positive success-oriented attitudes toward 
supervision. Includes role identification and transition, leadership styles and assertive-
ness, performance appraisal, counseling, discipline, employee relations, adminis-
trative support, planning and organizing, communications, training, investigations, 
and stress factors. Prerequisite: ADM J 68 or equivalent. Hours: (80) 40 
lect/discussion/practical application. Repeat: 1. CCS: Occupational Education. Not 
Transferable: Associate Degree only.

ADM J 61  EVIDENCE AND THE LABORATORY (3 units)
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. Prerequisite: None. Hours: (54) 3lect/demo/discussion. CCS: Occupa-
tional Education. Not Transferable: Associate Degree only.

ADM J 65  FIREARMS (1 unit)
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. Prerequi-
site: None. Hours: (18) 18lect/lab. CCS: Occupational Education. Not Transffer-
able: Associate Degree only.

ADM J 67ab  RESERVE OFFICERS’ BASIC TRAINING (P.O.S.T.)(4 units)
Prepares 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 orienta-
tion, 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. Prerequisite: None. Hours: 
(115) 115 lect/practical exercises. Repeat: 1. CCS: Occupational Education. Not Transffer-
able: Associate Degree only.

ADM J 67c  RESERVE OFFICERS’ BASIC TRAINING (P.O.S.T.) (3 units)
Prepares 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. Prerequisites: ADM J 67ab or 
74ab and 67b or equivalent. Hours: (115) 115 lect/practical exercises. Repeat: 1. 
CCS: Occupational Education. Not Transferable: Associate Degree only.

ADM J 68  PEACE OFFICERS’ BASIC TRAINING (12 units)
Training provides intensive basic instruction designed to prepare students for the perfor-
mance of peace officers’ duties. 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, C.P.R., vehicle operations, domestic violence, field training, and evaluation and related topics. **Prerequisite:** Admission to Peace Officers' Basic Training Program through the Kern County Regional Criminal Justice Training Center. **Hours:** (632) 28 lect/behavioral performance. 12 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ADM J 70g  INTERVIEWS AND INTERROGATIONS (P.O.S.T.) (1 unit)**
Expands and enhances the investigative communication skills of both patrol officers and criminal investigators. Contains instruction on communications skills, police informants, case law, and interview and interrogation techniques. **Prerequisite:** ADM J 68 or equivalent. **Hours:** (24) 24 lect/discussion/practical exercises. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ADM J 70z  FIELD TRAINING OFFICER (P.O.S.T.) (2 units)**
Develops the ability and skills of the student to facilitate the field training of new trainees. Includes definition of role and responsibilities; training techniques; formal and informal communication; performance evaluation and counseling; and legal consideration. **Prerequisite:** ADM J 68 or equivalent. **Hours:** (40) 40 lect/discussion/practical exercises. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ADM J 71abc  ADVANCED OFFICER TRAINING (P.O.S.T.) (1–2 units)**
Meets Commission on P.O.S.T. mandate for continuing professional training for all California peace officers below first-level management. A variable-format topics course including new legislation, specialized investigation, new court decisions, California Supreme Court, Proposition 8 implications, civil liability topics, officer survival techniques, law enforcement technology, and other topics. **Prerequisite:** ADM J 68 or equivalent. **Hours:** (24-40) 71a — 24 hrs, 71b — 32 hrs for 1 unit; 71c — 40 hrs. **Repeat:** 3 each. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly ADM J 71bc.

**ADM J 72  SKILLS AND KNOWLEDGE MODULAR TRAINING SERIES (P.O.S.T.) (0.5–2 units)**
Designed to meet Commission on P.O.S.T. mandate for continuing professional training for all California law enforcement personnel. Courses taught in this series are devoted exclusively to examination of a single topic. **Prerequisite:** ADM J 68 or equivalent. **Hours:** (9-40) 18 lect/lab per unit. **Repeat:** As indicated. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ADM J 72a  NEWS MEDIA RELATIONS**

**ADM J 72b  DOMESTIC VIOLENCE**
**Repeat:** 1. **Note:** Formerly ADM J 71f.

**ADM J 72c  CIVIL LIABILITY**

**ADM J 72d  TRAFFIC ACCIDENT INVESTIGATION**
**Repeat:** 1. **Note:** Formerly ADM J 70x.
ADM J 74ab  FIREARMS AND ARREST,  
SEARCH AND SEIZURE (P.O.S.T.) (2 units)  
Designed to meet the mandates established by the Commission on Peace Officers' Standards and Training and the Penal Code of California as required in section P.C. 832, including the laws of firearms, discretionary decision making, and communication skills. Also meets requirements established by the Business and Professions Code BPC 7514.1 et. seq. Prerequisite: None. Hours: (56) 8 lect/demo. Repeat: 1. CCS: Occupational Education. Not Transferable: Associate Degree only.

ADM J 78  DEFENSIVE TACTICS (2 units)  
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. Prerequisite: None. Hours: (54) 3 lect/demo/practice. CCS: Occupational Education. Not Transferable: Associate Degree only.

ADM J 249  COOPERATIVE WORK  
EXPERIENCE EDUCATION (1–4 units)  
College credit for learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Prerequisites: (1) Declared vocational major, (b) concurrent enrollment in seven or more units (including CWEE units, except summer school), (c) minimum 2.00 GPA or evaluation by instructor. Hours: 5 or more hours per week. (75 hours per semester per credit unit at a paid job, or 60 hours per semester per credit unit at a non-paid job.) Repeat: 3, not to exceed 16 units. CCS: Occupational Education. Transferable: CSU and Private Colleges. Credit limitations. For specific information see counselor. Note: Formerly W EXP 49.

CORRECTIONAL ADMINISTRATION

COR A 1  INTRODUCTION TO  
CORRECTIONAL ADMINISTRATION (3 units)  
A survey of the total “correctional cycle” and the relationships of its components including employment opportunities; employment requirements; statistics and the historical, theoretical and philosophical explanations of criminal behavior. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

COR A 2  INSTITUTIONAL SUPERVISION OF OFFENDERS (3 units)  
A survey of the basic knowledge and skills required of a corrections worker (institutions) including supervision of inmates, security procedures, enforcement of institutional rules and procedures, and other policies and procedures relating to institutional correctional supervision. Prerequisite: COR A 1 (may be taken concurrently) or evaluation by instructor. Hours: (54) 3 lect/discussion. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.
COR A 3  FUNDAMENTALS OF INTERVIEWING AND COUNSELING (3 units)
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. Prerequisite: COR A 1 (may be taken concurrently) or evaluation by instructor. Hours: (54) 3 lect/discussion/demo. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

COR A 4  FUNDAMENTALS OF PROBATION AND PAROLE (3 units)
Theory and techniques of probation/parole supervision, including historical development with emphasis on decision-making by the correctional employee. Prerequisite: COR A 1 or evaluation by instructor. Hours: (54) 3 lect/discussion. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

COR A 52  CORRECTIONAL OFFICER BASIC TRAINING (3 units)
Covers a number of basic training subjects designed to develop an understanding and working knowledge of the duties and responsibilities of the correctional officer. Prerequisite: None. Hours: (54) 3 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

COR A 60a  CRIMINAL EVIDENCE FOR CORRECTIONAL WORKERS (1 unit)
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. Prerequisite: None. Hours: (18) 2 lect for 9 weeks. Repeat: 3. CCS: Occupational Education. Not Transferable: Associate Degree only.

COR A 60b  INTERVIEWING TECHNIQUES, CORRECTIONAL PERSONNEL (0.5 unit)
Provides the student with a basic understanding of key elements of the interviewing process. Includes definition and purpose of interviews, importance of interviewer and interviewee relationships, communication process, questions formulations, probes and interview termination. Prerequisite: None. Hours: (8) 8 lect. Repeat: 3. CCS: Occupational Education. Not Transferable: Associate Degree only.

COR A 60c  GROUP COUNSELING TECHNIQUES FOR CORRECTIONAL PERSONNEL (1 unit)
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. Prerequisite: None. Hours: (18) 2 lect for 9 weeks. Repeat: 3. CCS: Occupational Education. Not Transferable: Associate Degree only.
COR A 60d  JUVENILE INSTITUTIONAL STAFF ORIENTATION (SECURITY) (1 unit)
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 reawareness of currently employed personnel in selected topic areas. **Prerequisite:** None. **Hours:** (18) 2 lect/discussion for 9 weeks. **Repeat:** 3. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COR A 60e  MENTALLY ILL OFFENDER (1 unit)
Develops the students' understanding of how to deal with mentally ill offenders on a professional basis. Includes definition of social deviance, basic psychopathology, psychotropic medication, psychiatric treatment alternatives, dangerous behavior prediction, major forensic issues, and effective use of psychological consultation. **Prerequisite:** None. **Hours:** (16) 16 lect. **Repeat:** 3. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COR A 61  CORRECTIONAL LAW (3 units)
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. **Prerequisite:** None. **Hours:** (54) 3 lect. **Repeat:** 3. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COR A 249  COOPERATIVE WORK EXPERIENCE EDUCATION – (1–4 units)
College credit for learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. **Prerequisites:** (a) Declared vocational major, (b) concurrent enrollment in seven or more units (including CWEE units, except summer school), (c) minimum 2.00 GPA or evaluation by instructor. **Hours:** 5 or more hours per week. (75 hours per semester per credit unit at a paid job, or 60 hours per semester per credit unit at a non-paid job.) **Repeat:** 3, not to exceed 16 units. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges. Credit limitations. For specific information see counselor. **Note:** Formerly W EXP 49.

**FIRE TECHNOLOGY**

FI TC 1  INTRODUCTION TO FIRE TECHNOLOGY (3 units)
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, incident command system, apparatus and equipment, fire hydraulics. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect/discussion/demo. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.
PUBLIC SERVICE 367

FI TC 2 FUNDAMENTALS OF PERSONAL FIRE SAFETY AND EMERGENCY ACTION (3 units)
Provides 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. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect/discussion/demo. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

FI TC 3 FUNDAMENTALS OF FIRE PROTECTION (3 units)
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. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect/discussion/demo. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

FI TC 4 FUNDAMENTALS OF FIRE BEHAVIOR AND CONTROL (3 units)
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. **Prerequisite:** FI TC 1 or equivalent. **Hours:** (54) 3 lect/discussion/demo. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

FI TC 5 FUNDAMENTALS OF FIRE PREVENTION (3 units)
Organization and function of fire prevention; inspections; surveying and mapping procedures; recognition of fire and life hazards; engineering a solution of a fire hazard; public education aspects of fire prevention. **Prerequisite:** FI TC 1 or equivalent. **Hours:** (54) 3 lect/discussion/demo. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

FI TC 6 FIRE PROTECTION EQUIPMENT AND SYSTEMS (3 units)
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. **Prerequisite:** FI TC 3 or equivalent. **Hours:** (54) 3 lect/discussion/demo. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.

FI TC 7 EMERGENCY MEDICAL TECHNICIAN I—NON-AMBULANCE (4 units)
Covers all techniques of emergency medical care presently considered within the responsibilities of the Emergency Medical Technician as well as all operational aspects of the job. Emphasizes the development of student skill in recognition of symptoms of illness and injuries and in proper procedures of emergency care. Meets California State Department of Health and State Board of Fire Services criteria for EMT I-NA Training. **Prerequisite:** FI TC 1 and/or FI TC 50a. **Hours:** (96) 80 lect/demo/practical exercises plus 16 hours of non-ambulance field experience. **Repeat:** 2. **CCS:** Occupational Education. **Transferable:** CSU and Private Colleges.
FI TC 50a  FIRE COMMAND 2A –
Command Tactics at Major Fires (2 units)
Provides Chief Officers with concepts and methods needed to understand complex fireground operations. Stresses the multiple company response and the efficient use of human and material resources in handling major structural fires. Accredited by the California Fire Service Training and Education System for Chief Officer certification. Prerequisite: FI TC 70r or 70s. Hours: (40) 40 lect/lab/simulated exercises. Repeat: 1. CCS: Occupational Education. Not Transferable: Associate Degree only.

FI TC 50b  FIRE COMMAND 2B –
Scene Management at Major Incidents (2 units)
Management techniques for Chief Officers to control major fire disasters. Techniques in developing and writing plans for fire disaster control and in managing local disasters. Accredited by the California Fire Service Training and Education System (C.F.S.T.E.S.) for Chief Officer certification. Prerequisite: FI TC 50a or equivalent course. Hours: (36) 36 lect/discussion for 1 week. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Formerly FI TC 60b.

FI TC 50c  FIRE COMMAND 2C
High-Rise Fire Tactics (1.5 units)
Command and control techniques used at the scene of an emergency by fire company officers. Emphasizes decision making, the act of commanding, personnel and organization structures and pre-planning for effective command performance particularly related to high-rise building emergencies. Includes a review of the Incident Command System instituted by the State of California Fire Services. Prerequisite: Fire Command 1A. Hours: (40) 27 lect, 13 lab for 1 week. Repeat: 1. CCS: Occupational Education. Not Transferable: Not degree applicable.

FI TC 50d  FIRE COMMAND 2D –
Management of Large-Scale Disasters (2 units)
Provides Chief Officers with essential management techniques needed to control major disasters. Covers techniques in developing and writing plans for disaster control and techniques in managing local disasters. Accredited by the California Fire Service Training and Education System for Chief Officer certification. Prerequisite: FI TC 60a or equivalent Hours: (40) 40 lect/lab/simulated exercises. Repeat: 1. CCS: Occupational Education. Not Transferable: Associate Degree only.

FI TC 50e  FIRE COMMAND 2E –
Wildland Fire Tactics (2 units)
California’s wildland fire problem will be examined through wildland fire safety, weather effects, fuels, fire behavior, initial attack methods, using support equipment, including the use of topographic maps, strategy and tactics, and air attack operations. Accredited by the C.F.S.T.F.S. Chief Officer certification requirements. Prerequisite: FI TC 50a. Hours: (40) 36 lect, 4 lab. Repeat: 1. CCS: Occupational Education. Not Transferable: Not degree applicable.
FI TC 50f  FIRE MANAGEMENT 2A –
Organizational Development and Human Relations (2 units)
Management principles in preparation for Chief Officer. Topics include internal and external influences; personal behavior of fire fighters; managing human relations through group dynamics; and problem solving techniques. **Prerequisite:** FI TC 51a. **Hours:** (40) 36 lect, 4 lab. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable. **Note:** Formerly FI TC 61a.

FI TC 50i  FIRE MANAGEMENT 2D – Master Planning (2 units)
A working knowledge of long-range fire protection planning directed toward those who will prepare a master plan for their community at some future time. Includes program planning, strategic planning, forecasting, systems analysis, systems design, research, networking, policy analysis and plans and reports. Accredited by the California Fire Service Training and Education System for Chief Officer certification. **Prerequisite:** Reading Level 2. **Hours:** (40) 40 lect/simulated exercises. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FI TC 50j  FIRE MANAGEMENT 2E –
Staff Assignments and Line Functions (2 units)
Relationships with legislative bodies, organizational techniques, goal setting, planning, organizing and controlling, production measurement, evaluation of program effectiveness, civilians of public safety services, public safety employees contractual system, development of department programs and municipal fire insurance programs. Accredited by the C.F.S.T.F.S. for Chief Officer certification. **Prerequisite:** FI TC 50f. **Hours:** (40) 40 lect/disc. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FI TC 51a  FIRE MANAGEMENT 1A (2 units)
Provides 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. **Prerequisite:** FI TC 1 or equivalent. **Hours:** (36) 36 lect/discussion. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FI TC 51b  FIRE COMMAND 1A (2 units)
Provides those having an interest in Fire Company Officer duties with information and experience in command and control techniques at the scene of an emergency. Emphasizes 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. **Prerequisite:** FI TC 1 or equivalent. **Hours:** (36) 36 lect/simulations. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FI TC 51c  FIRE COMMAND 1B (2 units)
Provides fire company officers with information and experience in command and control techniques used at the scene of hazardous material incidents. Emphasizes 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. **Prerequisite:** FI TC 70t. **Hours:** (36) 36 lect/simulations. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**FI TC 51d FIRE PREVENTION OFFICER IA (2 units)**
Provides students with the fundamental skills and knowledge needed to obtain the professional level of competency required for Fire Prevention Officer I. Covers areas of legal responsibilities and fire hazard characteristics of various materials. **Prerequisite:** FI TC 5 or equivalent. **Hours:** (36) 36 lect/demo. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**FI TC 51e FIRE PREVENTION OFFICER 1B (2 units)**
Provides 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. **Prerequisite:** FI TC 70t. **Hours:** (36) 36 lect/demo. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**FI TC 51f FIRE INVESTIGATION 1 (2 units)**
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 responsibilities of an investigator at scene of arson and explosives incidents. Meets P.O.S.T. certification requirements. **Prerequisite:** FI TC 50 or equivalent. **Hours:** (40) 40 lect/practical exercises. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**FI TC 51g FIRE SERVICE INSTRUCTOR IA (2 units)**
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 opportunity to apply major principles of learning through practice return demonstrations. **Prerequisite:** None. **Hours:** (36) 2 lect. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**FI TC 51h FIRE SERVICE INSTRUCTOR IB (2 units)**
A continuation of FI TC 70w. Gives the student more sophistication in the development, implementation and evaluation of in-service programs in the fire service. **Prerequisite:** FI TC 70w. **Hours:** (36) 2 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**FI TC 60 DRIVER/OPERATOR CERTIFICATION (2.5 units)**
Designed to develop knowledge and skills of perspective and employed Fire Engineers in pump operations. Content includes procedures on pumps, pumping principles, practical hydraulics, safe apparatus operation en route and at scenes of emergencies, principles of
reading and interpreting gauges, hydrant operations and drafting procedures. **Prerequisite:** FTTC 50a or equivalent course. **Hours:** (130) 130 lect/demonstration. **Repeat:** 3. CCS: Occupational Education. **Not Transferable:** Associate Degree only.

**FTTC 61 PRE-FIRE TRAINING (3 units)**
Basic educational and practical training essential for the achievement of the objectives specified for Fire Fighter Trainee. Covers areas of organizational procedures; forcible-entry tools; protective breathing apparatus; emergency medical care; inspection procedures; fire protection equipment and systems; wildland fire control; fire behavior; and petroleum fire procedures. **Prerequisite:** Reading Level 2. **Hours:** (120) 120 lect/manipulative exercises. **Repeat:** 1. CCS: Occupational Education. **Not Transferable:** Associate Degree only.

**FTTC 62 FIRE FIGHTER I ACADEMY (8 units)**
Basic educational and practical training essential for the achievement of the objectives specified for Fire Fighter I. Covers areas of organizational procedures; forcible entry tools; protective breathing apparatus; emergency medical care; inspection procedures; fire protection equipment and systems; wildland fire control; fire behavior; and petroleum fire procedures. Meets requirements for the California State Board of Fire Services Fire Fighter I certification standards. **Prerequisite:** FTTC 1, 2, 3, 4, 5 and 6 or equivalent. **Hours:** (320) 320 lect/manipulative exercises. **Repeat:** 1. CCS: Occupational Education. **Not Transferable:** Associate Degree only.

**FTTC 63 FIRE FIGHTER II ACADEMY (6 units)**
Advanced academic and manipulative training essential for the achievement of job tasks specified for Fire Fighter II. Covers inspection and maintenance of equipment, fire protection surveys, fire prevention inspections, reports and plans and fire alarm features. Meets requirements for the California State Board of Fire Services, Fire Fighter II certification. **Prerequisite:** FTTC 62 or equivalent. **Hours:** (235) 235 for a total of 40 weeks. CCS: Occupational Education. **Not Transferable:** Not degree applicable.

**FTTC 64a BASIC VOLUNTEER FIRE FIGHTER CERTIFICATION (1 unit)**
Basic knowledge and skills in firefighting practices for volunteers. Includes 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. Also includes areas of fire behavior and tactics; pumping procedures; hose evolutions, and ground ladder procedures. **Prerequisite:** None. **Hours:** (18) 18 lect/exercises. **Repeat:** 3. CCS: Occupational Education. **Not Transferable:** Not degree applicable.

**FTTC 64b ADVANCED VOLUNTEER FIRE FIGHTER CERTIFICATION (4.5 units)**
Provides existing volunteers with a basic knowledge and skills in fire fighting practices. Includes the fundamental usage of forcible-entry tools, ventilation procedures, rope usage, extinguisher practices, salvage and overhaul procedures, rescue procedures, cardio-pulmonary resuscitation techniques, fire behavior and tactics, fire streams, hose evolutions, and ladder procedures. **Prerequisite:** Evaluation by instructor.
BAKERSFIELD COLLEGE

Hours: (144) 13½ lect. 22½ lab for four weeks. Repeat: 2. CCS: Occupational Education. Not Transferable: Not degree applicable.

FI TC 70a  HAZARDOUS MATERIAL INCIDENTS (0.5 unit)
Provides 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. Prerequisite: FI TC 1 or equivalent. Hours: (30) 30 lect/discussion/demo. Repeat: 1. CCS: Occupational Education. Not Transferable: Associate Degree only.

FI TC 70b  HAZARDOUS MATERIALS 1a –
Properties of Hazardous Materials (2 units)
Physical and chemical terminology important to hazardous materials. Includes study of important terms which describe properties, reaction with other materials, and the effects upon human beings, environment, and property. Applies to Hazardous Materials Technician I certification. Prerequisite: FI TC 4, high school chemistry, Reading Level 1. Hours: (40) 18 lect, 22 lab. CCS: Occupational Education. Not Transferable: Not degree applicable.

FI TC 70c  HAZARDOUS MATERIALS 1b –
Hazardous Materials Safety (2 units)
Data use management of specific information on hazardous materials, toxicity and properties. Includes a study of protective equipment, protective measures highlighting pesticides, farm chemicals and other industrial chemicals and contamination procedures. Applies to Hazardous Materials Technician I certification. Prerequisite: FI TC 70b. Hours: (40) 18 lect, 22 lab. CCS: Occupational Education. Not Transferable: Not degree applicable.

FI TC 70d  HAZARDOUS MATERIALS 1c –
Assessing Hazardous Materials Emergencies (2 units)
Types of hazardous materials emergencies and the specific problems identified with each including fixed facilities, pipeline, maritime, aircraft, railroad, truck and common carrier emergencies. Applies to Hazardous Materials Technician I certification. Prerequisite: FI TC 70b and FI TC 70c. Hours: (40) 18 lect, 22 lab. CCS: Occupational Education. Not Transferable: Not degree applicable.

FI TC 70e  HAZARDOUS MATERIALS 1d –
Procedures for Handling Hazardous Materials Emergencies (2 units)
Instruction on hazardous materials incident evaluation risk analysis and assessment. Includes use of detection devices and their limitations, confinement techniques and safety precautions, in-depth study of unique evacuation procedures, environmental protection considerations, legislative requirements and regulations, analysis of control methods and Incident Command System. Applies to Hazardous Material Technician I certification. Prerequisites: FI TC 70b and FI TC 70c. Hours: (40) 18 lect, 22 lab. CCS: Occupational Education. Not Transferable: Not degree applicable.
FI TC 71a  SEASONAL FIREFIGHTER
BASIC TRAINING 1 (2 units)
Basic concepts, techniques, skills and theories on fire suppression and control. Includes fire organization, wildland fire behavior, and fire safety. Satisfies one-half of required training standards. **Prerequisite:** Evaluation by instructor. **Hours:** (36) 36 lect for 1 week. **Repeat:** 2. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FI TC 71b  SEASONAL FIREFIGHTER
BASIC TRAINING 2 (1 unit)
Manipulative and technical training in the identification and operation of fire tools and equipment. Includes fire-line construction practices, physical fitness and water-handling equipment. Satisfies one-half of required training standards. **Prerequisite:** Evaluation by instructor. **Hours:** (40) 9 lect, 31 lab. **Repeat:** 2. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FI TC 71c  INTRODUCTION TO FIRE BEHAVIOR (WATERSHED)(0.5 unit)
Helps students learn basic watershed fire behavior. Covers 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. **Prerequisite:** None. **Hours:** (9) 9 lect/discussion. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FI TC 71e  WILDLAND FIRE BEHAVIOR AND CONTROL (0.5 unit)
Basic watershed fire behavior covering 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. **Prerequisite:** None. **Hours:** (9-36) 9-36 lect/discussion/lab. **Repeat:** 3. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FI TC 72abc  HEAVY DUTY RESCUE 1–2–3 (0.5–0.5–1 unit)
Provides students with technical knowledge and practical skills necessary to successfully perform Heavy Duty Rescue emergencies. Covers 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. Accredited by the California Fire Service Training and Education System. **Prerequisite:** FI TC 2, EMT 1, or equivalent. **Hours:** (18-54) 72a: 18 for 0.5 unit; 72b: 36 for 0.5 unit; 72c: 54 for 1 unit lect/lab/manipulative exercises. **Repeat:** Any combination of 72abc equaling no more than four enrollments. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FI TC 72d  SWIFT WATER RESCUE (1.5 units)
Provides students with basic techniques necessary to perform emergency rescue procedures involving swift water rivers. Covers basic rescue knot practices, handling small rescue boats, emergency care, and controlling special hazards and problems in swift water emergencies. **Prerequisite:** None. **Hours:** (30) 30 lect and manipulative exercises. **Repeat:** 2. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
**FI TC 72e  ADVANCED SWIFT WATER RESCUE (1 unit)**
Refines students' skills in manipulating and controlling activities at heavy swiftwater rescue scenes. Includes advanced river crossing techniques, cross river strokes management, swiftwater search techniques, and team organizational requirements. **Prerequisite:** FI TC 70f. **Hours:** (20) 20 lect/manipulative exercises. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**FI TC 72f  AUTO EXTRICATION (1 unit)**
Provides students with knowledge and skills necessary to perform various vehicle rescues involving trapped victims. A systematic approach to vehicle rescue, and the use of mechanical and hand tools used in the extrication process. **Prerequisite:** None. **Hours:** (18) 18 lect/discussion/manipulative exercises. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**FI TC 72g  FIRE CONTROL 5 — Aircraft Fire Protection and Rescue Procedures (1 unit)**
Information, methods and techniques necessary for providing crash fire rescue services at airports. Topics include utilizing conventional fire apparatus and specialized crash fire rescue apparatus, crash fire rescue extinguishing agents, types of aircraft, and operations at crash scenes. **Prerequisite:** FI TC 50. **Hours:** (27) 18 lect, 9 lab. **Repeat:** 3. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly FI TC 70b.

**FI TC 72h EMT I — NON-AMBULANCE RECERTIFICATION PREPARATION (1unit)**
Updates the skills of EMT I — Non-Ambulance Certificate holders as prescribed by law. Reviews and updates material in FI TC 7 — EMT I — Non-Ambulance. Must be completed annually prior to recertification in Kern County. Meets California State Department of Health and State Board of Fire Services criteria for EMT I — NA Training. **Prerequisite:** Possession of a valid EMT I — NA Certificate which is current. **Hours:** (28) 16 lect/demo, 12 practical exercises. **Repeat:** 3. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**FI TC 73  INCIDENT COMMAND SYSTEM (0.5 unit)**
Familiarizes the student with the design, components, and organization of the Incident Command System. Covers Incident Command System in terms of general familiarization, interactive components, functions, responsibilities, supervision, and motivation techniques. **Prerequisite:** FI TC 50a or equivalent. **Hours:** (9-36) 9-36 lect/discussion. **Repeat:** 2. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**FI TC 74  PETROLEUM FIRE PROCEDURES (0.5 unit)**
Practical experiences in various firefighting procedures involving flammable liquid fire emergencies, at/or near petroleum installations. Includes utilization of safety practices and various extinguishing agents required for the extinguishment of different types of petroleum product fires. Certified by the California State Fire Service Training and Educational Program. **Prerequisite:** FI TC 50a or equivalent. **Hours:** (9) 9 lect/manipulative exercises. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
FI TC 75  FIRE FIGHTING TECHNIQUES (0.5 unit)
Advanced techniques of fire control involving the utilization of personnel, equipment, and extinguishing agents in emergency situations. Prerequisite: FI TC 50a or equivalent. Hours: (9-27) 9-27 lect/lab/manipulative exercises. Repeat: 3. CCS: Occupational Education. Not Transferable: Associate Degree only.

FI TC 77  STRUCTURE FIRE TRAINING (0.5 unit)
The latest techniques in structure fire control. Covers the latest specialized fire fighting techniques used to control residential, commercial and high-rise building fires. Prerequisite: FI TC 50a or equivalent. Hours: (9-36) 9-36 lect/lab. Repeat: 3. CCS: Occupational Education. Not Transferable: Associate Degree only.

FI TC 78  ADVANCED OFFICER TRAINING (0.5 unit)
Contemporary techniques of supervision, concentrating on supervision techniques identified by local fire service agencies. Prerequisite: FI TC 50a or equivalent. Hours: (9-36) 9-36 lect/lab/manipulative exercises. Repeat: 3. CCS: Occupational Education. Not Transferable: Associate Degree only.

FI TC 79  INSTRUCTOR ORIENTATION (0.5 unit)
Assists fire technology instructors with information needed to properly administer classroom activities. Includes information on the certification system, administrative procedures, curriculum development and organization, publication format and style, and teaching strategies for accredited regional courses. Prerequisite: FI TC 51g and 51h. Hours: (9-24) 9-24 lect for one week. Repeat: 3. CCS: Occupational Education. Not Transferable: Not degree applicable. Note: Formerly FI TC 81e.

FI TC 80  EMERGENCY RESPONSE TRAINING (0 unit)
Practical skills needed to control various types of incipient fires which occur in a structure. Covers search and rescue techniques, fire chemistry, fire extinguishment, and the practical use of a self-contained breathing apparatus. Prerequisite: Must be presently employed correctional personnel. Hours: (8) 8 lect/lab. Repeat: 3. CCS: Occupational Education. Not Transferable: Not degree applicable.

FI TC 91  FIREFIGHTING SKILLS MAINTENANCE (3 units)
Seminars and drills designed to provide maintenance of skills learned, including updates in technology relating to organization, hose, ladders, tools, salvage, chemistry, extinguishers and agents, fire control, prevention, arson, crowd and traffic control, mutual aid, communications, fire safety and emergency rescue techniques. Prerequisite: FI TC 50a, 61 or equivalent. Hours: (144) 3 lect/lab for 52 weeks. Repeat: 3. CCS: Occupational Education. Not Transferable: Associate Degree only.

FI TC 249  COOPERATIVE WORK EXPERIENCE EDUCATION (1–4 units)
College credit for learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Prerequisites: (a) Declared vocational major, (b) concurrent enrollment in seven or more units (including CWEE units, except summer school), (c) minimum 2.00 GPA or evaluation by instructor. Hours: 5 or more hours per week. (75 hours per semester per credit unit at a paid job, or 60 hours per semester per credit unit at a non-paid job.) Repeat: 3, not to exceed 16 units. CCS: Occupational Education. Transferable: CSU and Private Colleges. Credit limitations. For specific information see counselor. Note: Formerly W EXP 49.
SENIOR STUDIES

SEN S 90  TOPICS IN SENIOR ACTIVITY (0 units)
Topics may include travelogue-lectures, arts and crafts, physical fitness, oil painting, China painting and community chorus. 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. Prerequisite: None. Recommended for senior citizens and for other adults interested in senior programs. Hours: (3-54) 3 lect/demo or activity. 1-18 weeks. Repeat: 3. CCS: Community Education — Community and Civic Development. Not Transferable: Not degree applicable.
SOCIAL SCIENCE-INTERNATIONAL EDUCATION

Economics
History
Political 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

The following abbreviations are commonly used in the course descriptions: lect lecture; lab laboratory; demo demonstration; Repeat repeatability; CCS Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. NOTE: If repeatability is not shown, course may not be repeated.

ECONOMICS

ECON 1 PRINCIPLES OF ECONOMICS—MICRO (3 units)
An introduction to the principles of economic analysis and decision making from the viewpoint of the individual consumer, worker, and firm. Emphasizes the price system allocation of resources, and income, supply and demand analysis, the structure of American industry, and applications to current economic policy and problems. Prerequisites: Reading Level 1. MATH A is recommended. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. (CAN: ECON 4)

ECON 2 PRINCIPLES OF ECONOMICS—MACRO (3 units)
An introduction to the principles of economic analysis and decision making from the viewpoint of the society. Emphasizes national income analysis, unemployment, inflation, economic growth, fiscal and monetary policies, international trade, and applications to current economic policy and problems. Prerequisites: Reading Level 1. MATH A is recommended. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. (CAN: ECON 2)
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.

**HIST 4a–4b EUROPEAN CIVILIZATION (3–3 units)**
Surveys the growth of western civilization from its beginnings to the present. HIST 4a ends, and HIST 4b begins, with the opening of the 17th Century. Integrates political, social, and cultural developments brought about by European man in his attempt to realize his ideals of peace and happiness. The objective is to give the student a necessary perspective for the understanding of his own culture. **Prerequisite:** 4a: Reading Level 1; 4b: 4a recommended. **Hours:** (54-54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. (CAN: 4a: HIST 2; 4b: HIST 4)

**HIST 8a–8b HISTORY OF THE AMERICAS (3–3 units)**
Studies the development of Western Hemisphere history and its cultures from the Pre-Columbian cultures to the modern nations. History 8a surveys the history of man in this hemisphere from its earliest beginnings, through the discovery, exploration and conquest by the white man. Latin American coverage ends with the year 1790; United States history will be covered to 1877; Canadian historical development will end with the year 1838. History 8b continues the history of each cultural area to the present. Together the courses fulfill the education code requirements in the U.S. Constitution, American history and state and local government. History 8a and 8b may be taken in place of History 17a and 17b. **Prerequisite:** Reading Level 1. **Hours:** (54-54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

**HIST 17a–17b HISTORY OF THE UNITED STATES (3–3 units)**
Surveys the political, economic and cultural history of the United States from earliest colonial times to the present. The first semester (to 1877) includes a study of the U.S. Constitution and Federal Government. The second semester (since 1877) includes a study of the state and local government of California. The two semesters generally fulfill the “American History and Institutions Requirement” at state colleges and universities. **Prerequisite:** Reading Level 1. HIST 17a is not prerequisite to 17b. **Hours:** (54-54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations for HIST 17a. For specific information see counselor. (CAN: 17a: HIST 8; 17b: HIST 10)
HIST 18a  HISTORY OF EARLY CALIFORNIA (3 units)
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. Prereq-
quisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences.
Transferable: UC, CSU and Private Colleges.

HIST 18b  MODERN CALIFORNIA (3 units)
Examines the historical environment which has produced modern California, in-
cluding political, economic, social, and cultural development. Topics include: influ-
ence 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, “Okies” and “Arkies,” the movie and TV industry, and the
contribution of ethnic minorities. Fulfills code requirements in California state and local
government. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts
and Sciences. Transferable: UC, CSU and Private Colleges.

HIST 19a–19b  HISTORY OF ASIAN CIVILIZATIONS (3–3 units)
Surveys 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. Empha-
sizes the problems of political and economic development in the 20th Century. Prereq-
quisite: Reading Level 1. Hours: (54-54) 3 lect. CCS: Liberal Arts and Sciences.
Transferable: UC, CSU and Private Colleges. Note: Offered only occasionally.

HIST 20a–20b  BLACK HISTORY (3–3 units)
Surveys the colonial times to present. A history of the role and contribution of the
Black American from African beginnings to the present. The first semester (to 1877)
includes a study of the U.S. Constitution, and federal government. The second
semester (since 1877) includes a study of the state and local government of California.
The two semesters fulfill the “American History and Institutions Requirement” at state
colleges and universities. Prerequisite: Reading Level 1. HIST 20a is not a prereq-
quisite to 20b. Hours: (54-54) 3 lect/discussion. CCS: Liberal Arts and Sciences.
Transferable: UC, CSU and Private Colleges.

HIST 30a  EARLY CHICANO HISTORY (3 units)
Surveys the history of the Mexican-American borderlands, from Pre-Columbian times
until 1848. Examines the social, economic, and political evolution of the region em-
phasizing the inter-relationships between the histories of the United States and
Mexico. Fulfills code requirements in U.S. Constitution, American history and institu-
tions. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences.
Transferable: UC, CSU and Private Colleges. Note: Not open to students with credit in CH ST 30a.

HIST 30b  HISTORY OF CHICANOS IN THE SOUTHWEST (3 units)
Surveys the Chicanos emphasizing the development of California and the Southwest
from 1848 to the present. Examines the aftermath of the U.S.-Mexican War, 1846-1848; the inter-relationship of Mexican and U.S. history between 1860 and
1910; the effects of the Mexican Revolution of 1910 on the 20th Century experience of Chicanos in the U.S.; and the California State Constitution. Fulfills code requirements in California state and local government. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. **Note:** Not open to students with credit in CH ST 30b.

### HIST 33 HISTORY OF LATIN AMERICA (3 units)
Surveys Ibero-American societies from ancient Amerindian cultures through Spanish and Portuguese colonial societies to nineteenth and twentieth century nation states. Emphasizes the political, social and economic institutions of these Latin American societies. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges. **Note:** Not open to students with credit in CH ST 33.

### HIST 36 HISTORY OF NATIVE AMERICANS (3 units)
Studies 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. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. **Note:** Offered only occasionally.

### HIST 38 RUSSIA SINCE 1800 (3 units)
Studies 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. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect/discussion. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. **Note:** Offered one semester, every other year.

### HIST 40 THE FAR WESTERN FRONTIER (3 units)
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. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. **Note:** Offered only occasionally.

### HIST 47 THE OLYMPIC MOVEMENT (3 units)
Designed to provide a broad-based background in the historical, social, religious, political and athletic aspects of the Games of Olympia of ancient Greece as well as that of the modern era, A.D. 1896 to the present. Various events, rituals, and athletic achievements of the ancient and modern Olympic Games will be presented. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges. **Note:** Not open to students with credit in PH ED 47.
HIST 51  HISTORY OF KERN COUNTY (3 units)
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. Prerequisite: None. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Not Transferable: Associate Degree only.

POLITICAL SCIENCE

POL S 1  AMERICAN GOVERNMENT (3 units)
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 17a or HIST 17b satisfies code requirements in the U.S. Constitution, American history, and institutions, and California state and local government. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

POL S 2  COMPARATIVE GOVERNMENT (3 units)
Focuses on the principal nations of the industrialized world: United Kingdom, France, Federal Republic of Germany, U.S.S.R. and Japan. Presents for study certain nations in sensitive geographic areas or countries whose size and developing economies make them important: People's Republic of China, Brazil, Mexico, Israel, Egypt and India. Prerequisite: Reading Level 1. HIST 17a or 17b or POL S 1 is recommended. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

POL S 3  INTERNATIONAL POLITICS (3 units)
Surveys the dynamics and ideologies of present-day international politics and rivalries. Historical depth evolution of the techniques and arts of diplomacy, and the causes of war. Prerequisites: Successful completion of HIST 17a and HIST 17b or POL S 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

POL S 5  CURRENT ISSUES IN AMERICAN GOVERNMENT
(1–3 units. Limit 6 units.)
Studies 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. Prerequisite: Reading Level 1. Hours: (30-36-66) 30 campaign participation for 1 unit; 2 per week lect/discussion for 2 units; 2 per week lect/discussion plus 30 campaign participation for 3 units. Repeat: 3 or until a limit of 6 units is reached. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

POL S 42  PRINCIPLES OF LEADERSHIP (2 units)
Trains 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. Prerequisite: Reading Level 1. Hours: (36) 2 lect. Repeat: 3. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.
SP ST 49  SPECIAL STUDIES: HONORS (1 unit)
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. Prerequisite: Nomination by faculty members. Hours: (18) CCS:
Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges.

SP ST 201  SPECIAL PROJECTS AND STUDIES
(1 unit. Limit 6 units.)
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. Prerequisite: Recommendation by department
chair. Hours: (18) 18 per unit. Repeat: May be repeated until 6 units is reached. CCS:
Liberal Arts and Sciences. Not Transferable: Associate Degree only.
THEATRE ARTS

Theatre Arts is a component of both the liberal arts and general education programs. Students who major in the various specialties of the dramatic arts often pursue careers in professional theatre, teaching, or activities in community theatre. Many other students have used training in theatre arts toward attaining confidence and self-assurance in professions such as law, the ministry and business.

ASSOCIATE IN 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

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEAT 2ab</td>
<td>3.0</td>
<td>THEAT 6</td>
<td>3.0</td>
</tr>
<tr>
<td>THEAT 3a</td>
<td>3.0</td>
<td>THEAT 7</td>
<td>3.0</td>
</tr>
<tr>
<td>THEAT 3b</td>
<td>2.0</td>
<td>THEAT 27</td>
<td>1-3.0</td>
</tr>
<tr>
<td>THEAT 4</td>
<td>2.0</td>
<td>THEAT 28</td>
<td>1-3.0</td>
</tr>
</tbody>
</table>

Note: Theatre majors should enroll for at least one unit of THEAT 27 or THEAT 28 per semester.

Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>UN</th>
<th>Course</th>
<th>UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEAT 5</td>
<td>3.0</td>
<td>THEAT 32</td>
<td>3.0</td>
</tr>
<tr>
<td>THEAT 8</td>
<td>3.0</td>
<td>THEAT 35</td>
<td>1.0</td>
</tr>
<tr>
<td>THEAT 12c</td>
<td>3.0</td>
<td>ART 1</td>
<td>3.0</td>
</tr>
<tr>
<td>THEAT 15</td>
<td>3.0</td>
<td>ART 2ab</td>
<td>3.0</td>
</tr>
<tr>
<td>THEAT 24</td>
<td>1.5</td>
<td>ART 3ef</td>
<td>3.0</td>
</tr>
<tr>
<td>THEAT 31</td>
<td>3.0</td>
<td>WOOD 1</td>
<td>3.0</td>
</tr>
</tbody>
</table>

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: lect lecture; lab laboratory; demo demonstration; Repeat repeatability; CCS Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. NOTE: If repeatability is not shown, course may not be repeated.
THEATRE ARTS

THEAT 1  INTRODUCTION TO ACTING (3 units)
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. Prerequisite: Reading Level 1. Hours: (54) 3 lect. Field trips may be required. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

THEAT 2ab  ELEMENTS OF ACTING (3 units)
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. Prerequisites: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

THEAT 3a – 3b – 3c – 3d  APPLIED ACTING PROBLEMS (2 – 2 – 2 – 2 units)
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 2ab, or of more advanced problems posed by the second year student actor. Prerequisites: For 3a, concurrent enrollment in 2ab; 3b is prerequisite to 3c and 3c to 3d. Reading Level 1. Hours: (72 each) 1 lect, 3 lab. Repeat: 3. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

THEAT 4  INTRODUCTION TO STAGECRAFT (3 units)
Covers basic set construction, scenic paint, scene painting, and stage properties, 3-D scenery, special effects, lighting and sound. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

THEAT 5  INTRODUCTION TO SCENE DESIGN (3 units)
Covers the functions and types of scene design, drafting and painting equipment, techniques, elements of design, drafting a floor plan, and model making. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

THEAT 6  INTRODUCTION TO STAGE MAKE-UP (3 units)
Covers character analysis, facial anatomy, old age make-up, 3-dimensional make-up, rubber prosthesis, beards and mustaches, and non-realistic make-up. Prerequisite: Reading Level 1. Hours: (54) 3 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.
THEAT 7 INTRODUCTION TO STAGE COSTUME (3 units)
Designed for the student interested in theatrical costumes and period fashions. Includes basic sewing techniques, pattern information, types of fabric, costume history and design. Also provides a practical approach through construction of costume pieces, costume renderings and participation on a wardrobe crew. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

THEAT 8 MUSICAL THEATRE (3 units)
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. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect. **Repeat:** 1. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

THEAT 9 INTRODUCTION TO LIGHTING AND SOUND DESIGN (3 units)
Fundamentals of designing lighting and sound for the theatre, emphasizing complete projects developed during the course. Included are purposes of lighting/sound; research techniques; methods of design, materials and equipment — characteristics and applications; plot drafting, developing a personal style, and typical industry employment opportunities. **Prerequisite:** THEAT 4 or evaluation by instructor. **Hours:** (54) 3 lect/demonstration. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

THEAT 10 INTRODUCTION TO STAGE MANAGEMENT AND TECHNICAL DIRECTION (3 units)
Basic skills of stage management and technical direction. Format includes participation in a workshop-style presentation of scenes and/or a fully mounted production as part of class activities. Skills emphasized include stage managers' duties during production planning; auditions and casting; acting rehearsals; technical rehearsals and performances; technical directors’ duties during production planning, construction, load-in; technical rehearsals and performances, load-out; and employment in industry. **Prerequisite:** THEAT 1 or THEAT 4, or evaluation by instructor. Reading Level 1. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges.

THEAT 12c SUMMER THEATRE WORKSHOP (3 units)
Practical application of dramatic theory by producing productions on the outdoor stage or other open spaces. Intense concentration on production emphasizing character development, body movement, vocal development and ensemble performance. **Prerequisite:** Reading Level 1; or evaluation by instructor. **Hours:** (108) 18 lect/lab for 6 weeks. **Repeat:** 3. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.
THEAT 15 STAGE MOVEMENT (3 units)
The use of the body as an expressive instrument. Emphasizes discovering and freeing body tension, correcting body alignment, use of space, communicating with the body, and period stylized movement. Includes training in the use of weapons and hand-to-hand combat on stage. **Prerequisite:** Reading Level 1, THEAT 1; or evaluation by instructor. **Hours:** (54) 3 lect/laboratory. **Repeat:** 1. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

THEAT 24 MUSICAL THEATRE PRACTICUM (1.5 units)
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. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect/studio. **Repeat:** 3. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

THEAT 27 ACTING THEATRE LABORATORY (1–3 units. Limit 8 units.)
The rehearsal and production of both main stage and experimental theatre dramas. Theatre activity for the beginner or expert in acting, publicity, or theatre management. **Prerequisite:** Reading Level 1. **Hours:** (60-180) 60 hours per unit. **Repeat:** 3 or until a limit of 8 units is reached. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

THEAT 28 TECHNICAL THEATRE LABORATORY (1–3 units. Limit 8 units.)
Participation in set construction, lighting, make-up, costume, properties, or any other technical area of theatrical productions. **Prerequisite:** Reading Level 1. **Hours:** (60-180) 60 hours per unit. **Repeat:** 3 or until a limit of 8 units is reached. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

THEAT 30 FILM FOCUS (1 unit)
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. **Prerequisite:** Reading Level 1. **Hours:** (18) 3 lect. **Repeat:** 3. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

THEAT 31 INTRODUCTION TO FILM STUDIES (3 units)
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. **Prerequisite:** Reading Level 1. **Hours:** (54) 3 lect/disc. **Repeat:** 1. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.
THEAT 32  CONTEMPORARY FILM STUDIES (3 units)
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. Prerequisite: Reading Level 1. Hours: (54) 3 lect. Repeat: 1. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

THEAT 35  INTRODUCTION TO THEATRE (1 unit)
The study of and exposure to live theatrical performances will increase the appreciation and enjoyment of this often neglected area of the arts and humanities. Prerequisite: Reading Level 1. Hours: (18) 3 lect for 6 weeks. Repeat: 3. CCS: Liberal Arts and Sciences. Transferable: CSU and Private Colleges.

THEAT 227  ACTING THEATRE LABORATORY (1–3 units)
The rehearsal and production of both main stage and experimental theatre dramas. Theatre activity for the beginning or expert in acting, publicity, or theatre management. Open entry/open exit. Prerequisite: Reading Level 1. Hours: (60-180) 60 per unit. Repeat: 3 or until a limit of 8 units is reached. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

THEAT 228  TECHNICAL THEATRE LABORATORY (1–3 units)
Participation in set construction, lighting, make-up, costume, properties, or any other technical area of production. Open entry/open exit. Prerequisite: Reading Level 1. Hours: (60-180) 60 per unit. Repeat: 3 or until a limit of 8 units is reached. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and Private Colleges. UC credit limitations. For specific information see counselor.

THEAT 249  COOPERATIVE WORK EXPERIENCE EDUCATION (1–4 units)
College credit for learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Prerequisites: (a) Declared vocational major, (b) concurrent enrollment in seven or more units (including CWEE units, except summer school), (c) minimum 2.00 GPA, or evaluation by instructor. Hours: 5 or more per week. (75 per semester per credit unit at a paid job, or 60 per semester per credit unit at a non-paid job). Repeat: 3 times or until a limit of 16 units is reached. CCS: Occupational Education. Transferable: CSU and Private Colleges. Credit limitations. For specific information see counselor.
WORK EXPERIENCE
Cooperative Work Experience Education

Bakersfield College, in cooperation with business, industry and the community makes it possible for students to earn elective credit toward a degree and/or certificate through employment experience. The college may grant credit to a student in an amount not to exceed four (4) units per semester for part-time occupational work experience or three (3) units per semester for general work experience. Full-time summer work experience can also qualify for credit.

Types of Cooperative Work Experience Education

A. General Work Experience Education (W EXP 250) is supervised employment of students. It is intended to assist them in acquiring desirable work habits, career awareness and positive job attitudes. The jobs held by students need not be related to their occupational goals or college program. Contact the General Work Experience Coordinator or the Job Placement Office for more information.

B. An Internship or Occupational Work Experience Education (W EXP 249) is the extension of classroom occupational learning opportunities and career awareness into employment related to the student's college program or major. Work Experience credit may be transferable to many colleges and universities. Contact a counselor or work experience coordinator for specific information.

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: lect lecture; lab laboratory; demo demonstration; Repeat repeatability; CCS Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Prerequisites are expressed as minimum requirements. See page 64 for a complete explanation. NOTE: If repeatability is not shown, course may not be repeated.

WORK EXPERIENCE

W EXP 249  COOPERATIVE WORK EXPERIENCE EDUCATION
(1 – 4 units. Limit 16 units)
College credit for learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college and student. Prerequisites: (a) Declared vocational major, (b) concurrent enrollment in seven or more units (including CWEE units, except summer school), (c) minimum 2.00 GPA, or evaluation by instructor. Hours: (75 hours per semester per credit unit at a paid
job, or 60 hours per semester credit unit at a non-paid job) 5 or more hours per week. Repeat: 3 or until a limit of 16 units is reached. CCS: Occupational Education. Transferable: CSU and Private Colleges. Credit limitations. For specific information see counselor. Note: Formerly W EXP 49.

W EXP 250  GENERAL WORK EXPERIENCE EDUCATION
(1 – 3 units. Limit 6 units.)
Offers students an opportunity to combine a planned occupational program with progressive on-the-job experience (OJT) and practical learning experiences in the world of work. Prerequisites: (a) pursue a planned Work Experience program, (b) concurrent enrollment in seven or more units (including GWE units) except summer school, (c) minimum 2.00 GPA, or evaluation by instructor. Hours: (75 hours per semester credit per credit unit at a paid job; or 60 hours per semester credit unit at a non-paid job.) Repeat: 2 or until a limit of 6 units is reached. CCS: Occupational Education. Not Transferable: Associate Degree only.
ADMINISTRATION and FACULTY

COLLEGE ADMINISTRATION

President .............................................. Richard L. Wright
Director of Business Services ....................... Alice M. Pinkerton
Director of Information Services ....................
Director of Public Information and Publications ..... Cynthia D. Pollard
Dean of Administrative Services .................... David C. Scott
Associate Dean of Administrative Services ........ Claire J. Larsen
Dean of Development ................................ Patrick O. Shaffer
Dean of Instruction ................................ Charles R. Carlson
Associate Dean of Instruction ...................... Robert D. Allison
Associate Dean of Instruction ...................... David J. Rosales
Associate Dean of Instruction ......................
Assistant Dean of Instruction, Delano ............. Nan Gomez-Heitzeberg
Dean of Students .................................... Francis P. Gornick, Jr.
Assistant Dean of Students ........................ Michael A. Buda
Director of Personnel ...............................

COUNSELORS

James Carden ................................. Donna Litherland
Pansy Collins ................................. Judy Lynn Mays
Hoolyse Davajian .............................. Dan Murillo
Vera Diaz ........................................ Robert Reader
Manuel Gonzales .............................. Larry Robinson
Helen Gordon ................................. Barbara Thomas
Michael Gutierrez ............................ Patricia Thompson
Richard Kelsey ............................... Harvey Warren
ADMINISTRATION AND FACULTY

EMERITI

AKIN, Helen B.—Family and Consumer Education
ANGELO, Joseph E.—Public Services
ANNIS, Margaret E.—Business
APPEL, Jacqueline—English
ARAKELIAN, Margaret—Health Careers
AXFORD, Marian—English
BISHOP, C. Gilbert—Administration
BONNER, Frederick—Industrial Education
BOYCE, Ferris A.—Health Careers
BOYD, W. Harland—Social Science
BRACKE, Victor—Art
BRADLEY, Jesse T.—Industrial Education, Mathematics
BRAILSFORD, Robert E.—Physical Science
BRIGGS, Sally M.—Business
CAFFERTY, Kathryn W.—Health Careers
CHAPMAN, Robert E.—Communications
CLARK, Robert L.—Administration
CLOSE, V. Dean—Business
COLLIER, Willye P.—Family and Consumer Education
COLLINS, John J.—Administration
CULVER, Wayne A.—Counseling
DABBS, Lowell P.—English
DRENNAN, Harry—Industrial Education
DUNSTAN, Earl—Business
ELLIOIT, Ruth—English
EWING, John L.—Mathematics
FAHSBENDER, Kenneth E.—Administration
FINCH, Bill—Physical Education
FREED, J. Paul—Life Science
GRAFF, Mary Elizabeth—English
GRASS, Richard R.—Business
HALLING, Victor J.—Behavioral Science
HANSEN, Holger—Agriculture
HANSEN, Marie—Family and Consumer Education
HARKINS, Richard H.—Administration
HARRIS, R. Byron—Family and Consumer Education
HASLETT, Donald R.—Public Service
HAYNES, J. Earl—Industrial Education
HEFFERNAN, William J.—Administration
HEMMERLING, Edwin M.—Mathematics
HENCH, Irene E.—Library
HIGGINS, Eloise—Family and Consumer Education
HILTON, Sybil P.—Physical Education
HORWEGE, Henry—English
HOWARD, Paul M.—Administration
HOYT, Barbara—Family and Consumer Education
HULSEBUS, Lowell B.—Physical Science
JOHNSON, Catherine C.—Mathematics
JOHNSON, Donald E.—Physical Science
JOHNSON, Marguerite—English
JOHNSON, W.F.—Mathematics
JONES, Wylie L.—Business
KARP, Stanley E.—Physical Science
KEOUGH, Edna—English
KILBURN, H. Parley—Administration
KLEINHAMPLE, Alvin—Industrial Education
LANDON, Norma K.—Health Careers
LAWRENCE, George E.—Life Science
LEFEVRE, Eva—Foreign Language
LOKEN, Herbert L.—Physical Education, Athletics
LONGACRE, Arvella—Health Careers
MAGUIRE, Ruth E.—Counseling
MC CLANAHAN, Walter—Administration
MC GEE, George M.—Computer Science
MC MASTERS, Ronald—Administration
MERSON, Thomas B.—Administration
MILLIKEN, Yvonne W.—Administration
NIELSEN, William A.—Mathematics
NUNES, Alice—Physical Education
NYSTROM, Daniel R.—Life Science
OGDEN, L. Furn—Business
OGLESBY, John—Agriculture
OLIVEIRA, Robert G.—Music
OSTERKAMP, Dalene M.—Art
PETERSON, Claire A.—Counseling
RIPPEY, Clayton—Art
RODEWALD, Donald E.—News and Publicity
ROWE, Jack—Mathematics
RUIZ, Richard B.—Art, Industrial Drawing
SALAVERRIA, Helena—Foreign Language
SAND, Pauline—English
SANDEN, Milton R.—Administration
SCHAFFER, Adelaide—Foreign Language
SELBY-DABBS, Phyllis—Communications
SELVERA, Frank L.—Library
SHELDON, Harriet—Administration
SHERMAN, Frank W.—English
ADMINISTRATION AND FACULTY

SIMONSEN, Edward E.—Administration
SMITH, Peter D.—Industrial Education
SMITH, Robert A.—Business
STEWART, Elbert—Behavioral Science
TIGNER, Richard O.—Business
TILLMAN, Patricia E.—Health Careers
TISCHBIREK, Edwin A.—Industrial Education
TRITTEN, Betty—Mathematics
TRUSLER, Willard W.—Physical Education
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
WETZLER, John—Library
WHETSLER, Dell V.—Administration

FACULTY

ACKLAND, John R.—Professor............................................ Biology
B.A., Hanover College;
M.A., (Biology), California State University, Humboldt;
M.A., (Education), California State University, Humboldt
ALLISON, Robert D............................................ Associate Dean of Instruction
B.S., California State University, San Jose;
M.S., Oregon State University; Ed.D., University of Northern Colorado
ALLSMAN, Ronald L.—Professor............................. Bacteriology, Biology, Pharmacology
B.S., Pharm. D., University of California Medical Center, San Francisco
BARRY, Vincent—Professor............................................. Philosophy
B.A., Seton Hall University; M.A., Fordham University
BELCHER, Duane M.—Professor........................................ Psychology
A.B., M.A., University of California, Berkeley
BELCHER, Linda K.—Associate Professor................................. Computer Studies
B.S., Miami University, Oxford, Ohio;
B.S., Coleman College, San Diego
BENJAMIN, Carl—Professor........................................... Mathematics
B.S., Central State University; M.S., Syracuse University
BENSTON, Carol—Associate Professor.................................. English
B.A., Rollins College; M.A., University of Miami
BENSTON, Richard L.—Professor......................................... English
B.A., M.A., University of Washington
BIHLMAN, Georgene—Professor......................................... Physical Education
A.B., California State University, San Jose; M.A., Stanford University
BLUNT, Marlene Lou—Associate Professor. Physical Education
B.S., Bowling Green State University;
M.S., University of California, Los Angeles

BOWERS, Sandra—Professor. Director, Women's Athletics
B.S., Georgia College; M.A., California State University, Sacramento

BOWSER, Carl G.—Professor. Physical Education, Head Football Coach
B.S., M.A., California Polytechnic State University, San Luis Obispo

BOWTELL, Rita E.—Associate Professor. Business
A.A., Bakersfield College;
B.S., M.B.A., California State University, Bakersfield

BRADFORD, Jesse J.—Professor. Social Science
B.S., Arizona State University;
M.A., California State University, Bakersfield

BRAGO, Michael—Associate Professor. English
B.A., M.A., Florida State University;
M.A., University of California, Los Angeles

BRANNAN, Charles E.—Assistant Professor. Agriculture
A.A., Bakersfield College

BRINK, Bertil—Professor. Photography
A.B., M.A., California State University, San Francisco

BROOKS, Dale W.—Professor. Chairperson, Music Department
B.A., M.A., University of Washington

BUCKLEY, Margaret—Professor. Chairperson, Health Careers Department, Director, ADN Program
R.N., St. Mary's College of Nursing, San Francisco; B.A., P.H.N., California State University, Fresno;
M.A., California State University, Bakersfield; Ed.D., Nova University

BUDA, Michael A.—Assistant Dean of Students
B.S., M.C., Arizona State University; J.D., Ph.D. Syracuse University

BURR, Arnold H.—Associate Professor. Industrial Education
A.A., Bakersfield College; B.A., California State University, Fresno

CAMPBELL, Elsie—Professor. L.V.N. Program
R.N., B.S., University of California School of Nursing,
San Francisco; M.A., Teachers College, Columbia University

CARDEN, James F.—Professor. Counselor
A.B., M.S., University of Southern California

CARLSON, Charles R.—Dean of Instruction
A.A., Santa Monica College;
A.B., University of California, Los Angeles;
M.A., California State University, Northridge;
Ph.D., University of Southern California

CHEUNG, Cecilia Y.—Associate Professor. Head Librarian
B.A., University of Hong Kong; M.L.S., State University of New York at Albany;
M.B.A., Adelphi University

CHICHESTER, Ben W.—Professor. Biology
B.S., M.S., University of Idaho
CHISM, Ray A. - Professor ............................................. Research
B.A., University of California, Berkeley;
M.A., California State University, San Francisco

CLARK, Diane D. - Assistant Professor ......................... L.V.N. Program
B.S.N., Intercollegiate Center for Nursing Education,
Spokane, Washington

CLARK, Lucy G. - Professor ............................................. Family and Consumer Education
B.A., Austin College, Sherman, Texas;
M.A., Pacific Oaks College, Pasadena, California

CLARK, Nancy - Assistant Professor ......................... Child Development Center Coordinator
A.A., Bakersfield College Family and Consumer Education

CLARK, Orelie Louise - Assistant Professor .................... Business
B.A., California State University, San Jose

COLLINS, Pansy L. - Professor ........................................ Counseling
A.A., Bakersfield College; B.A., California State University at Fresno;
M.A., California State University, Los Angeles

COLLIS, Gerry D. - Professor ........................................... Director of Athletic Foundation,
A.B., M.A., University of Denver Physical Education

COON, Frederick M. - Professor ................................ Industrial Drawing
B.A., M.A., University of Michigan;
M.A., California State University, Bakersfield

COPELIN, Mary Helen - Professor ................................ Speech
B.A., University of California, Santa Barbara;
M.A., Ph.D., University of California, Los Angeles

CORY, E. Wallace - Professor ........................................... History
B.A., Linfield College; M.A., Ph.D., University of Georgia

COVEY, Robert L. - Professor ........................................... Health-Physical Education,
B.S., University of Kansas; Men's Track and Field Coach,
M.Ed., Oregon State University Men's Cross-Country Coach

COX, Gary E. - Professor ........................................... Industrial Education
A.A., Bakersfield College; B.A., California State University, Fresno;
M.A., California State University, Long Beach

COYLE, William P. - Assistant Professor ....................... Director of Food Services
A.A., Bakersfield College

CUNNINGHAM, Carol A. - Professor .................................. English
B.A., College of Notre Dame, Belmont;
M.A., California State University, San Francisco

DAMRON, J. Duane - Professor ................................ Physical Education,
B.S., University of California, Davis Assistant Football Coach
M.S., University of Southern California

DAVAJIAN, Hoolyse Ana - Associate Professor ................ Enabler—Supportive
B.S., M.A., California State University, Fresno Service Center

DAVIDSON, Robin E. - Assistant Professor ....................... Aeronautics
A.A., Bakersfield College; B.S., The University of
The State of New York

DAVIS, Alvin D. - Professor ............................................. Art
B.F.A., M.F.A., Otis Art Institute, Los Angeles
DAVIS, Thomas H., III—Professor
A.B., M.A., University of California, Berkeley

DE KEY, Paul W.—Assistant Professor
A.A., Bakersfield College
B.S., University of San Francisco

DE STEFANO, Margaret J.—Professor
B.A., MSC J., University of New Haven; M.S., Southern Connecticut State University; J.D., Hofstra University

DE LEEFSON, Ronald—Professor
B.A., California State University, San Jose; M.A., California State University, San Francisco

DHARIWAL, Mita—Associate Professor
B.A., California State University, Fresno; M.A., Utah State University

DIAZ, Vera M.—Instructor
A.A., Bakersfield College; B.A., M.A. California State University, Bakersfield

DIETZ, Robert C.—Professor
Pharm. D., University of California, San Francisco

DILLON, Bona L.—Associate Professor
B.S., Ball State University; M.A., Ball State University

DISKIN, Mary L.—Associate Professor
B.S., Castleton State College; M.S., Utah State University

DOMMER, A. Mark—Associate Professor
A.A., Bakersfield College; B.S., University of Wisconsin-Stout, Menomonie, Wisconsin; M.A., California State University, Bakersfield

DOOLEY, Duane L.—Assistant Professor
Vocational Automotive Credential

DOUVILLE, Donald R.—Professor
B.A., University of California, Berkeley; M.S., California State University, Fresno; Ed.D., Nova University

DRAPER, Ray E.—Professor
Biological Sciences
B.S., University of Utah; M.S., Oregon State University

DRIVER, George N.—Associate Professor
A.A., Yuba College; B.A., University of California, Berkeley

DUAX, Richard L.—Professor
B.A., De Paul University; M.A., Stanford University

EDGMON, Sharon J.—Professor
Mathematics
A.A., Bakersfield College, A.B., University of California, Berkeley; M.A., Pepperdine University

EDMONDS, Bobby J.—Professor
Chairperson; Behavioral Science Department
B.A., M.A., California State University, San Diego

EDWARDS, Nancy Joan—Professor
English
B.A., Whittier College; M.A., California State University, San Jose; Ph.D., Claremont Graduate School
FALZONE, Peter A. — Associate Professor ........................................ Mathematics
B.S., M.S.T., University of Florida

FANUCCHI, Larry — Professor ........................................ Safety Officer, Director of Employers
B.A., California State University, Fresno; Training Resource; Chairperson,
M.A., University of Northern Colorado Industrial Education

FELDMAN, Philip A. — Associate Professor ........................................ Learning Center Coordinator
B.A., Stanford University; B.A., California State University, Bakersfield

FERNANDEZ, Ruben M. — Associate Professor ...................................... Chicano Studies Coordinator;
B.A., M.A. California State University, Bakersfield Community Services Coordinator

FIDLER, Sheran Kaye — Associate Professor ........................................ A.D.N. Program
A.A., Bakersfield College; B.S.N., California State University, Bakersfield
M.A., California Lutheran College

FISHER, Jackie Lee — Professor .................................................. Director of Fire Technology
B.A., California State University, Fresno;
M.A., California State University, Bakersfield

FLAMING, Robert W. — Professor .................................................. Industrial Education
B.A., California State University, Fresno;
M.A., California State University, Long Beach

FLEENOR, Terry R. — Professor .................................................. English
B.A., M.A., Arizona State University
Ph.D., University of California, Riverside

FUNK, Robert — Professor .................................................. Architecture
B.A., University of California, Santa Barbara;
M.A., California State University, San Jose

GARRETT, Clifton — Professor .................................................. Chairperson, Social Science/International
B.A., M.A., California State University, Los Angeles Education Department,
History, French, Spanish

GARRETT, Judith P. — Professor .................................................. Speech Pathologist
B.A., (Education), California State University, Los Angeles;
B.A., M.A., (Communicative Disorders), California State
University, Northridge

GILMAN, Edith — Professor .................................................. Director, A.D.N. Program
R.N., Fresno General Hospital; B.S., M.S, Chapman College

GLYNN, James A. — Professor .................................................. Sociology, Computer Studies
B.A., M.A., California State University, San Jose

GOMEZ-HEITZEBERG, Nan .................................................. Assistant Dean, Delano Center
B.A., M.A., California State University, Fresno

GONZALEZ, Manuel, Jr. — Associate Professor .................................. Coordinator, E.O.P.S.,
A.A., Bakersfield College; B.S., California State University; Counselor
San Jose; M.A., California State University, Bakersfield

GOODWIN, Gregory L. — Professor .................................................. History
B.S., Northwestern University; M.A., Stanford University;
Ph.D., University of Illinois

GORDON, Helen Winn — Professor .................................................. Reading, Basic Skills,
B.A., M.A., California State University, Sacramento; English
Ed.D., Nova University
GORNICK, Francis P. ......................................................... Dean of Students  
B.S., M.S., California State University, Sacramento;  
Ph.D., St. Louis University

GRADEK, Dale—Professor .................................................... Industrial Education  
A.B., M.A., California State University, Humboldt

GRIDER, Dallas E. — Associate Professor .............................. Physical Education  
B.A., M.A., University of California, Los Angeles  
Assistant Football Coach

GROGAN, Darlene L. — Professor ........................................ A.D.N. Program  
R.N., Asbury School of Nursing;  
B.S.N., M.A., California State University, Bakersfield

GULLAM, Jacqueline Ellen—Associate Professor ..................... Chairperson, Family  
B.A., M.A., Pacific Oaks College  
and Consumer Education Department

GUTIERREZ, Michael R. — Associate Professor ....................... Counselor  
A.A., Bakersfield College; B.A., Fresno State University;  
M.A., California State University, Bakersfield

HAGEMAN, Edgar J. — Professor .......................................... Industrial Education  
B.A., M.A., California State University, Fresno

HAGLER, Mary Jane—Associate Professor .............................. Radiologic Technology  
B.A., University of California, Los Angeles;  
M.H.A., Loma Linda University

HALL, Lynne—Professor .................................................... Coordinator, Assessment Program,  
B.A., University of California, Santa Barbara;  
Counselor  
M.A., California State University, Bakersfield

HAMILTON, Betty Jo—Professor .......................................... English  
B.A., M.A., George Peabody College

HANER, Jerry L. — Assistant Professor .................................. Business  
A.A., Lansing Community College; B.S., Western Michigan University

HANLEY, Glenn R. — Professor ............................................ Director of Transfer Center  
B.A., M.A., Ph.D., University of Northern Colorado

HAYCOCK, Lawrence K. — Professor .................................... Agriculture  
A.A., Bakersfield College;  
B.S., M.A., University of California, Davis

HEATER, Chester Rollin—Associate Professor ......................... Mathematics  
B.A., California State University, Bakersfield;  
M.S., California State Polytechnic University, San Luis Obispo

HELMSTEDTER, Warren E. — Professor ................................ Business, Industrial Education  
A.A., Bakersfield College; B.V.E., California State University, Fresno;  
M.A., California State University, Bakersfield

HERNANDEZ, John P. — Professor ........................................ English, Philosophy  
B.A., M.A., University of Michigan;  
Ed.D., University of California, Los Angeles

HILL, Sally F. — Professor .................................................. Psychology  
B.A., M.A., California State University, San Jose

HOFFMAN, Norman—Professor ............................................. Health—Physical Education  
B.S., M.Ed., Oregon State University
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Department</th>
<th>University</th>
<th>Degree(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOKIT, Lloyd D.</td>
<td>Professor</td>
<td>Chairperson, Agriculture Department</td>
<td>California Polytechnic State</td>
<td>B.S., M.S.</td>
</tr>
<tr>
<td>HONIG, Sasha</td>
<td>Professor</td>
<td>History, Spanish</td>
<td>California University of California, Santa Barbara;</td>
<td>B.A.</td>
</tr>
<tr>
<td>HOWARD, Evan D.</td>
<td>Professor</td>
<td>English</td>
<td>California State University, San Jose</td>
<td>B.A., M.A.</td>
</tr>
<tr>
<td>HULLETT, Phyllis K.</td>
<td>Professor</td>
<td>Director of Re-Entry Center</td>
<td>University of Minnesota</td>
<td>B.S., M.E.</td>
</tr>
<tr>
<td>INSKEEP, James B.</td>
<td>Professor</td>
<td>History, Political Science, International Relations, and Religious Studies</td>
<td>University of Chicago</td>
<td>Ph.B., A.M.</td>
</tr>
<tr>
<td>JACOBS, Fred R.</td>
<td>Professor</td>
<td>Librarian</td>
<td>California University of California, Berkeley;</td>
<td>A.B., University of California, Berkeley; M.A., California State University, Fullerton; M.S.L.S., University of Southern California</td>
</tr>
<tr>
<td>JACOBSON, LaVonda Hope</td>
<td>Associate Professor</td>
<td>A.D.N. Program</td>
<td>California State University, Bakersfield;</td>
<td>B.A., California Lutheran College</td>
</tr>
<tr>
<td>JANEWAY, Miriam E.</td>
<td>Professor</td>
<td>English</td>
<td>California University of California, Riverside</td>
<td>B.A., M.A.</td>
</tr>
<tr>
<td>JOHNSON, Donald M.</td>
<td>Professor</td>
<td>Coordinator, Supportive Service Center</td>
<td>California University of California, Los Angeles;</td>
<td>B.A., M.A.</td>
</tr>
<tr>
<td>JOHNSON, Jane P.</td>
<td>Associate Professor</td>
<td>Learning Center, German</td>
<td>Oregon</td>
<td>B.A., M.A.</td>
</tr>
<tr>
<td>JOHNSON, Walter H.</td>
<td>Professor</td>
<td>Chairperson, Health and Physical Education Department, Director, Men's Athletics</td>
<td>California State University, San Jose</td>
<td>B.A., M.A.</td>
</tr>
<tr>
<td>JONES, Carl Lee</td>
<td>Associate Professor</td>
<td>Automotive</td>
<td>Santa Rosa Junior College;</td>
<td>A.A.</td>
</tr>
<tr>
<td>JORGENSEN, Dennis M.</td>
<td>Professor</td>
<td>Industrial Education</td>
<td>Chico</td>
<td>B.S., California State University at Long Beach</td>
</tr>
<tr>
<td>JUDD, Janice L.</td>
<td>Associate Professor</td>
<td>English</td>
<td>Western Washington State College</td>
<td>B.A., M.A.</td>
</tr>
<tr>
<td>KELLEY, Pamela Sue</td>
<td>Associate Professor</td>
<td>Health-Physical Education</td>
<td>California University of the Pacific, Stockton</td>
<td>B.A., M.A.</td>
</tr>
<tr>
<td>KELLY, William W.</td>
<td>Professor</td>
<td>Agriculture</td>
<td>California State University, Fresno</td>
<td>B.S., M.S.</td>
</tr>
<tr>
<td>KELSEY, Richard</td>
<td>Professor</td>
<td>Chairperson, Counseling Department</td>
<td>Montana State University, Bozeman;</td>
<td>B.S., Montana State University, Bozeman; M.S., California State University, San Diego</td>
</tr>
<tr>
<td>KERANEN, David M.</td>
<td>Professor</td>
<td>Mathematics</td>
<td>Michigan State University; M.A.T., Cornell University</td>
<td>B.S., Michigan State University; M.A.T., Cornell University</td>
</tr>
</tbody>
</table>

*Note: The table contains the full names, titles, departments, and degrees of all the faculty members mentioned.*
KILDEBECK, Jack P. — Professor .............................. Life Science
A.A., Grossmont College; B.S., M.S., California State
University, San Diego

KIMLER, Thomas — Professor .............................. Physical Science
B.S., Arizona State University; M.S., Syracuse University

KIRCHNER, Eugene H. — Professor .......................... Director of Planetarium, Physics
B.A., M.S., State University of Iowa

KIRKLAND, Olin C. — Professor ............................ Director of Academic
B.A., California State University, Humboldt;
M.A., University of California, Berkeley

KRAFVE, Ralph E. — Professor .............................. Physical Education,
B.S., Ed.M., Oregon State University  Men's Assistant Basketball Coach

LACKEY, Robert — Associate Professor ........................ Electronics
B.S., California State Polytechnic University, San Luis Obispo

LANGO, Peter M. — Professor .............................. Physical Education,
B.A., California State University, Fresno;
M.S., California Polytechnic State University, San Luis Obispo

LARSEN, Claire J. — Associate Professor .......................... Associate Dean of Faculty Services
B.S., Utah State University; M.A., California State University,
San Jose; Ed.D., Brigham Young University

LEE, Patricia — Professor .............................. Chemistry
B.S., M.S., University of California, Berkeley

LEWIS, Gaylen G. — Professor .............................. Social Science,
B.S., Utah State University;
M.A., University of California, Berkeley

LINGO, Marci — Assistant Professor .......................... English
A.A., Bakersfield College; B.A., University of Pacific;
M.A., California State University, Bakersfield

LITHERLAND, Donna — Professor .......................... Counselor, Reading
B.S., North Dakota State University;
M.A., California State University, Fresno

LOCKFORD, Joyce C. — Professor .......................... English
B.A., University of California, Berkeley; M.A., University of Utah

LOGAN, Carolyn P. — Associate Professor .......................... Business
B.S., California State Polytechnic University, San Luis Obispo

LUDEKE, Jerry L. — Professor .............................. Learning Center, Reading,
A.B., Indiana University;  Enabler—Learning Disability Specialist
M.A., Tulane University; M.A., Stanford University

LUDEKE, John M. — Professor .............................. History
A.B., M.A., Stanford University; M.A., University of Oregon

LYMAN, John C. — Associate Professor .......................... Anthropology, Geography, Geology
A.B., California State University, San Diego

LYMAN-HURST, Margaret A. — Associate Professor .......................... English, Spanish
B.A., San Diego State College, M.A., California State University, Bakersfield

MARQUEZ, Fernando N. — Assistant Professor .......................... Business
A.A., Bakersfield College; B.S., California State University, Fresno

MARTINEZ, Alexa C. — Associate Professor .......................... Coordinator, Dental Assisting
A.A., Bakersfield College
MASON, James W. — Professor. Music, Director of Orchestra
B.A., University of California, Riverside;
M.A., D.M.A., Stanford University

MAYS, Judy Lynn — Assistant Professor. Counselor
B.A., California State University, Bakersfield;
M.A., California State Polytechnic University, San Luis Obispo

MC GOWAN, Patricia — Professor. English
B.A., Whitman College, Washington;
M.A., California State University, Chico

MC KAY, Peter B. — Professor. History, Computer Studies
A.B., M.A., Stanford University

MEERT, Paul — Professor. Mathematics
B.A., University of Notre Dame;
M.A., California State University, Bakersfield

MEIER, Bruce N. — Professor. Social Science, History, Speech
B.A., University of California, Berkeley; J.D., Boalt Hall Law School, University of California, Berkeley

MELENDEZ, Ramon — Professor. Spanish
B.A., M.A., California State University, San Francisco

MESSICK, Randall Lyn — Assistant Professor. Theatre Arts
B.A., California State University, Fresno;
M.F.A., University of California, Davis

MOATS, Duane H. — Associate Professor. Business
B.S., University of Virginia; M.S., California State University, Bakersfield

MOELLER, Jr., Lorence Carl — Associate Dean of Instruction, Occupational Education
B.A., Iowa State University;
M.A., Chapman College; Ph.D., Iowa State University

MOORE, Carol A. — Associate Professor. Business
A.A., Bakersfield College; B.A., California State University, San Jose

MOORE, Crystal D. — Instructor. Psychology
A.A., Bakersfield College; B.A., M.A., California State University, Bakersfield

MORETTI, Michael E. — Associate Professor. Mathematics
B.A., Claremont Men's College; M.S., Cal Poly, Pomona;
M.A., Claremont Graduate School; M.S., California State Polytechnic University, Pomona

MURILLO, Daniel J. — Associate Professor. Counselor
A.A., Bakersfield College; B.A., California State University, Bakersfield; M.A., University of Southern California

NASO, Albert — Professor. Art
B.I.D., Pratt Institute; M.A., New York University

NELSON, William G. — Professor. Physical Education, Golf Coach
B.A., M.A., University of Wyoming

NEWCOMB, Myra Ann — Associate Professor. Health-Physical Education, Women's Softball Coach
B.S., California State College, Sonoma;
M.A., California State College, Sonoma
NEWTON, Joe M. — Professor. Real Estate Coordinator, Business 
B.S., M.B.A., California State University, Fresno

ORR, Deborah M. — Associate Professor. Director, Center of Business,
B.S., M.S., California State University, Bakersfield

PAGE, Charles R. — Assistant Professor. Industrial Education
A.A., Bakersfield College

PALITZ, Merriem—Professor. Chairperson, English Department
B.A., University of Wisconsin; J.D., Marquette University

PARSONS, Robert B. — Professor. Computer Studies,
A.A., Bakersfield College; B.S., University of California, Riverside; M.S., University of Iowa

PATZ, Penelope—Associate Professor. Chairperson, Business Department
B.S., Ball State University; M.S., Utah State University

PENNIGROTH, Barbara Ann—Associate Professor. A.D.N. Program
B.S.N., California State University, Los Angeles;
M.A., California State University, Bakersfield

PERKINS, Nancy Jo—Associate Professor. Radiologic Technology Coordinator
B.S., Loma Linda University, Loma Linda;
M.A., California Lutheran College

PFUTZENREUTER, Bruce—Professor. Health-Physical Education,
B.S., M.A., University of Colorado

PINKERTON, Alice M. — Director of Business Services
B.S., M.S., California State University, Bakersfield

PLUTA, Katherine R. — Associate Professor. English
B.A., M.A., M.S., California State University, Fullerton

POLLARD, Cynthia D. — Director of Public Information
B.A., University of Southern California and Publications

POLLARD, Harvel—Professor. Physical Education,
B.A., M.A., California State University, San Jose

POOLE, E. Donald—Professor. Physics
A.B., M.S., California State University, San Diego

PRUETT, Paul E. — Professor. Chairperson, Life Science Department
B.A., University of California, Berkeley; M.S., North Carolina State University; LL.B., LaSalle Ext. University

QUILLING, Howard—Professor. Learning Center
B.M., University of Southern California; M.A., California State University, Los Angeles; M.M., University of Southern California;
M.A., California State University, Bakersfield
Ph.D., University of California, Santa Barbara

READER, Robert J. — Associate Professor. Counselor
B.S., M.Ed., Oregon State University

RHEA, David—Professor. Philosophy
B.A., Augustana College; M.A., Northwestern University

RICE, Norma L. — Assistant Professor. L.V.N. Program
R.N., B.S., Walla Walla College, Washington

RICHARDSON, Gayle M. — Assistant Professor. Business
B.S. California State College, Humboldt
ROBINSON, Chalita M.—Professor. Chairperson, Art Department
B.A., Xavier University; M.F.A., Michigan State University

ROBINSON, Larry, Jr.—Professor. Counselor, Psychology
B.A., West Virginia State College; M.Ed., Tuskegee Institute

ROMANOWICZ, Christine—Associate Professor. A.D.N. and L.V.N. Program
B.S., University of San Francisco; M.A., Pepperdine University

ROSALES, David J.—Associate Dean of Instruction
B.A., M.A., California State University, Bakersfield

ROSELLINI, Kathleen M.—Associate Professor. Director, Student Affairs
B.A., M.A., California State University, Bakersfield

ROSON, Phillip R.—Professor. Industrial Education
A.A., Long Beach City College;
B.A., California State University, Bakersfield

SAMPF, DeAnn—Assistant Professor. Special Education
B.A., California State University, Northridge

SAUTER, Lucille M.—Professor. Classified Personnel Officer
A.B., Emporia State Teachers College; M.A., University of Oklahoma

SCHIFFMAN, Robert A.—Associate Professor. Anthropology
B.A., California State University, Northridge;
M.A., University of California, Santa Barbara

SCOTT, David C.—Dean of Administrative Services
A.B., Stanford University; M.A., Reed College;
Ed.D., University of California, Los Angeles

SHEAFER, Patrick O.—Dean for Development
B.A., M.Ed., California State University, Fresno

SEMPLE, Dean Bruce—Professor. Music
B.M.E., Dakota Wesleyan University;
M.A., California State University, San Jose

SHARP, Carol J.—Associate Professor. Family and Consumer Education
B.A., California State University, Fresno;
M.A., California State University, Bakersfield

SHEFTON, Joel I.—Assistant Professor. Chemistry
B.A., M.S., Brigham Young University

SHERMAN, Archible W.—Professor. Director of Justice/Corrections Programs
A.A., Bakersfield College; B.S., M.B.A., California State University, Long Beach; Ed.D., Nova University

SHINN, Debra Kay—Associate Professor. Learning Disabilities Specialist
B.S., M.A., West Virginia University

SILVER, A.B.—Professor. Psychology, English
B.A., M.A., California State University, San Francisco; AAABET

SILAS, Allen R.—Professor. Mathematics
B.A., M.S., Vanderbilt University; Ph.D., George Peabody College

SMITH, Stephen D.—Professor. Chairperson, Computer Studies
B.A., University of California, San Diego;
M.A., University of California, Santa Barbara
SPROUL, Joyce F.—Assistant Professor. Special Education, Learning Skills
   A.A. Bakersfield College; B.A., California State University, Bakersfield
STANLEY, Dorothy Dianne—Professor. Mathematics
   B.S., M.Ed., University of Oregon
   M.A., California State University at Los Angeles
STANSBURY, Donald L.—Professor. English
   B.S., University of California, Los Angeles;
   M.A., California State University, San Jose
TARJAN, Janet Walker—Assistant Professor. Mathematics
   B.S., University of Illinois; M.S., Northwestern University, Evanston
TATSUNO, Marlene—Professor. Art
   A.A., Bakersfield College;
   B.A., M.A., California State University, Chico
THIROUX, Jacques P.—Professor. Chairperson, Philosophy Department
   B.A., Pomona College; M.A., (English) California State University, San Francisco; M.A., (Philosophy), University of Southern California
THOMAS, Barbara L.—Associate Professor. Counselor
   B.S., Cornell University;
   M.A., California State University, Bakersfield
THOMAS, William M.—Professor. Political Science, Social Science
   B.A., M.A., California State University, San Francisco
THOMPSON, Patricia Ann—Associate Professor. Counselor, General Studies
   B.A., University of California, Davis;
   M.A., California State University, Los Angeles, (Anthropology);
   M.A., California State University, Bakersfield (Counseling)
TOKUYAMA, M. Yukie—Professor. History, Social Science
   B.A., University of California, Los Angeles;
   M.A., University of Washington
TOLLE, Alan E.—Professor. Life Science
   A.B., Westminster College
TREMBLEY, Shirley R.—Professor. Mathematics
   A.B., University of California, Los Angeles;
   M.A., California State University, Fresno
TRIPLETT, Josephine L.—Assistant Professor. Family and Consumer Education
   A.A., Bakersfield College
TUTTLE, Robert E.—Professor. Industrial Education
   A.A., Bakersfield College; B.A., California State University, Fresno; M.A., California State University, Long Beach
WALL, Charles Casswell—Professor. Management, Business
   B.A., M.B.A., San Francisco State University;
   Ph.D., University of California, Los Angeles
WARD, Ray M.—Professor. Chairperson, Physical Science, Department, Chemistry
   B.S., M.S., Oregon State University
WARREN, Harvey—Professor. Counselor
   A.A., Bakersfield College; B.S., Montana State University;
   M.S.W., California State University, Fresno
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Department/Program</th>
<th>Education/Professional Background</th>
</tr>
</thead>
<tbody>
<tr>
<td>WATTS, Jane L.</td>
<td>Associate Professor</td>
<td>English</td>
<td>B.A., M.A., Michigan State University</td>
</tr>
<tr>
<td>WAYNE, Wendy</td>
<td>Associate Professor</td>
<td>Project Director, Community</td>
<td>A.B., University of California, Los Angeles; Connection for Child Care</td>
</tr>
<tr>
<td>WEBB, Henry R.</td>
<td>Professor</td>
<td>Director, College Theatre, Theatre Arts</td>
<td>B.A., M.A., California State University, Fresno</td>
</tr>
<tr>
<td>WEBBER, Elizabeth C.</td>
<td>Associate Professor</td>
<td>Anthropology</td>
<td>A.B., University of California, Los Angeles; Connection for Child Care</td>
</tr>
<tr>
<td>WHITEHOUSE, James M.</td>
<td>Professor</td>
<td>Psychology</td>
<td>A.A., American River College; B.A., M.A., California State University, Sacramento; Ph.D., California School of Professional Psychology; Post-Ph.D., Temple University Medical School, Eastern Pennsylvania Psychiatric Institute</td>
</tr>
<tr>
<td>WICKEY, Robert O.</td>
<td>Professor</td>
<td>Chemistry, Industrial Drawing</td>
<td>B.S., University of Missouri; M.S., University of Minnesota</td>
</tr>
<tr>
<td>WILLARD, Caroline</td>
<td>Professor</td>
<td>Coordinator, E.F.L. Program</td>
<td>B.A., Michigan State University; M.A., University of Texas; Connection for Child Care</td>
</tr>
<tr>
<td>WILLARD, J. David</td>
<td>Professor</td>
<td>English</td>
<td>B.A., M.A., University of Texas; Connection for Child Care</td>
</tr>
<tr>
<td>WILLIAMS, Billie E.</td>
<td>Professor</td>
<td>Chairperson, Mathematics Department</td>
<td>B.S., Northeastern State College; Connection for Child Care</td>
</tr>
<tr>
<td>WILSON, Harry S.</td>
<td>Professor</td>
<td>Photography</td>
<td>B.F.A., M.F.A., San Francisco Art Institute</td>
</tr>
<tr>
<td>WILSON, Mary Llou</td>
<td>Professor</td>
<td>Director of Financial Aids</td>
<td>B.A., Montana State University; Connection for Child Care</td>
</tr>
<tr>
<td>WOBBE, Paul Fredrick</td>
<td>Professor</td>
<td>Assistant Director, A.D.N. Program</td>
<td>B.S., California State University, San Francisco; Connection for Child Care</td>
</tr>
<tr>
<td>WOOD, Charles H.</td>
<td>Professor</td>
<td>Director of Band, Instrumental Music</td>
<td>B.S., University of Ohio; Ph.D., University of California, Los Angeles</td>
</tr>
<tr>
<td>WORTINGTON, Marilyn</td>
<td>Associate Professor</td>
<td>Instructional Coordinator, Family and Consumer Education</td>
<td>B.S., College of Saint Scholastica; Connection for Child Care</td>
</tr>
<tr>
<td>WRIGHT, Richard L.</td>
<td></td>
<td>President</td>
<td>B.A., M.A., Kent State University; Connection for Child Care</td>
</tr>
<tr>
<td>WULF, Evelyn M.</td>
<td>Associate Professor</td>
<td>Librarian</td>
<td>B.A., M.A., University of Denver</td>
</tr>
<tr>
<td>YALE, Thomas H.</td>
<td>Professor</td>
<td>Life Science</td>
<td>B.A., M.A., California State University, San Jose</td>
</tr>
</tbody>
</table>
## ADJUNCT FACULTY

Instructors who have taught for Bakersfield College at least two years.

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACOSTA, John</td>
<td></td>
<td>Communications, Foreign Language</td>
</tr>
<tr>
<td>AGALOS, Phyllis Lee</td>
<td></td>
<td>Management</td>
</tr>
<tr>
<td>AGUIRRE, Juan L.</td>
<td></td>
<td>Food Service/Culinary Arts</td>
</tr>
<tr>
<td>AKIN, Morgan Clay</td>
<td></td>
<td>Forestry</td>
</tr>
<tr>
<td>ALEWINE, Ronald</td>
<td></td>
<td>Apprenticeship 65</td>
</tr>
<tr>
<td>ANDERSON, Diana L.</td>
<td></td>
<td>Reading</td>
</tr>
<tr>
<td>ANDREWS, Gary Arnold</td>
<td></td>
<td>Accounting</td>
</tr>
<tr>
<td>ANSPACH, Robert J.</td>
<td></td>
<td>Real Estate</td>
</tr>
<tr>
<td>ARMENDARIZ, Bonnie L.</td>
<td></td>
<td>Data Processing</td>
</tr>
<tr>
<td>ARRIOALA, Andrew M.</td>
<td></td>
<td>Apprenticeship 55</td>
</tr>
<tr>
<td>ASHLEY, Charles</td>
<td></td>
<td>English</td>
</tr>
<tr>
<td>BAGGALEY, John F.</td>
<td></td>
<td>Management</td>
</tr>
<tr>
<td>BAILEY, Laura E.</td>
<td></td>
<td>Theatre</td>
</tr>
<tr>
<td>BAKER, Darlyn L.</td>
<td></td>
<td>Health Careers</td>
</tr>
<tr>
<td>BARRETT, Jerome C.</td>
<td></td>
<td>Speech</td>
</tr>
<tr>
<td>BARTER, Stephen</td>
<td></td>
<td>Data Processing</td>
</tr>
<tr>
<td>BAYNE, Michael P.</td>
<td></td>
<td>Data Processing</td>
</tr>
<tr>
<td>BECK, Eugene</td>
<td></td>
<td>Physical Education</td>
</tr>
<tr>
<td>BELL, Marjorie Lee</td>
<td></td>
<td>English</td>
</tr>
<tr>
<td>BENEDICT, Jay Frank</td>
<td></td>
<td>Medical Science</td>
</tr>
<tr>
<td>BERTHAUME, Gary Michael</td>
<td></td>
<td>History</td>
</tr>
<tr>
<td>BINV, Mary Ann</td>
<td></td>
<td>Speech</td>
</tr>
<tr>
<td>BRACKLEY, Joseph E.</td>
<td></td>
<td>English</td>
</tr>
<tr>
<td>BRAUN, Michael Richard</td>
<td></td>
<td>Philosophy</td>
</tr>
<tr>
<td>BRENNAN, Oliver G.</td>
<td></td>
<td>Computer Science</td>
</tr>
<tr>
<td>BRIGHAN, John E.</td>
<td></td>
<td>History</td>
</tr>
<tr>
<td>BROWN, Larry D.</td>
<td></td>
<td>Apprenticeship 60</td>
</tr>
<tr>
<td>BRUCE, Styles William</td>
<td></td>
<td>Health Education</td>
</tr>
<tr>
<td>BURTNER, Jack</td>
<td></td>
<td>Psychology</td>
</tr>
<tr>
<td>CAMPBELL, Diana R.</td>
<td></td>
<td>Art</td>
</tr>
<tr>
<td>CARTWRIGHT, Ribon</td>
<td></td>
<td>Management</td>
</tr>
<tr>
<td>CARVER, Michael P.</td>
<td></td>
<td>Apprenticeship 54</td>
</tr>
<tr>
<td>CATER, Timothy A.</td>
<td></td>
<td>Mathematics</td>
</tr>
<tr>
<td>CHAPMAN, Judy D.</td>
<td></td>
<td>Child Development</td>
</tr>
<tr>
<td>CHAPMAN, Thelma E.</td>
<td></td>
<td>English</td>
</tr>
<tr>
<td>CHURCH, Patricia B.</td>
<td></td>
<td>English</td>
</tr>
<tr>
<td>CIMENTAL, Virginia</td>
<td></td>
<td>Senior Studies</td>
</tr>
<tr>
<td>COOPER, Wilson</td>
<td></td>
<td>Mathematics</td>
</tr>
<tr>
<td>COX, Edward J.</td>
<td></td>
<td>Apprenticeship 55</td>
</tr>
<tr>
<td>CRABTREE, Gary Thomas</td>
<td></td>
<td>Real Estate</td>
</tr>
<tr>
<td>DAHL, Jennifer L.</td>
<td></td>
<td>Coach, Women's Basketball</td>
</tr>
<tr>
<td>DELTORO, Paul</td>
<td></td>
<td>Apprenticeship 65</td>
</tr>
<tr>
<td>DOLL, David M.</td>
<td></td>
<td>Construction</td>
</tr>
<tr>
<td>DONALDSON, Harriet P.</td>
<td></td>
<td>Interior Design</td>
</tr>
<tr>
<td>Name</td>
<td>Position/Department</td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>DOUGLAS, W. Scott</td>
<td>Assistant Coach, Football</td>
<td></td>
</tr>
<tr>
<td>DUEY, Barbara</td>
<td>Office Training/Data Processing</td>
<td></td>
</tr>
<tr>
<td>DUNLAP, Janice L.</td>
<td>Physical Education</td>
<td></td>
</tr>
<tr>
<td>EDELMAN, Robert J.</td>
<td>Data Processing</td>
<td></td>
</tr>
<tr>
<td>ELIZALDE, Cynthia L.</td>
<td>Coach, Women’s Volleyball</td>
<td></td>
</tr>
<tr>
<td>ELLIOTT, Ruth</td>
<td>English</td>
<td></td>
</tr>
<tr>
<td>ELLIS, Barbara Wanner</td>
<td>Child Development</td>
<td></td>
</tr>
<tr>
<td>ERRECART, Kathryn</td>
<td>English</td>
<td></td>
</tr>
<tr>
<td>FERENCI, Raymond H.</td>
<td>Music</td>
<td></td>
</tr>
<tr>
<td>FILKINS, Mylon E.</td>
<td>Animal Science</td>
<td></td>
</tr>
<tr>
<td>FILLBRANDT, Jeanne M.</td>
<td>Mathematics</td>
<td></td>
</tr>
<tr>
<td>FLEENOR, Carol Ann</td>
<td>English</td>
<td></td>
</tr>
<tr>
<td>FLICK, Jerry L.</td>
<td>Apprenticeship 58</td>
<td></td>
</tr>
<tr>
<td>FRALEY, Phillip M.</td>
<td>Accounting</td>
<td></td>
</tr>
<tr>
<td>FRANKLIN, Michael J.</td>
<td>Learning Skills</td>
<td></td>
</tr>
<tr>
<td>GIenger, William</td>
<td>Social Science</td>
<td></td>
</tr>
<tr>
<td>GIORDANO, Walter J.</td>
<td>Senior Studies</td>
<td></td>
</tr>
<tr>
<td>GOODWIN, Peggy J.</td>
<td>Data Processing</td>
<td></td>
</tr>
<tr>
<td>GORDON, Clifton B.</td>
<td>Learning Skills</td>
<td></td>
</tr>
<tr>
<td>GORDON, Robert H., Jr.</td>
<td>Mathematics</td>
<td></td>
</tr>
<tr>
<td>GRASS, Roger R.</td>
<td>Business Administration</td>
<td></td>
</tr>
<tr>
<td>GREGREY, Raymond A.</td>
<td>Work Experience</td>
<td></td>
</tr>
<tr>
<td>GRECIAN, Nancy</td>
<td>Speech</td>
<td></td>
</tr>
<tr>
<td>GREENBERG, Ella L.</td>
<td>Mathematics</td>
<td></td>
</tr>
<tr>
<td>GRIMES, Edward C.</td>
<td>Sociology</td>
<td></td>
</tr>
<tr>
<td>HAAS, Karl</td>
<td>Music</td>
<td></td>
</tr>
<tr>
<td>HAFENFELD, Richard E.</td>
<td>Forestry</td>
<td></td>
</tr>
<tr>
<td>HALE, David M.</td>
<td>Astronomy</td>
<td></td>
</tr>
<tr>
<td>HALL, Diane M.</td>
<td>Child Development</td>
<td></td>
</tr>
<tr>
<td>HEAD, Rebecca Ann</td>
<td>Mathematics</td>
<td></td>
</tr>
<tr>
<td>HEWES, Doris</td>
<td>Psychology</td>
<td></td>
</tr>
<tr>
<td>HEYART, George L.</td>
<td>Apprenticeship 85</td>
<td></td>
</tr>
<tr>
<td>HICKS, Junko</td>
<td>English</td>
<td></td>
</tr>
<tr>
<td>HODGSON, Tam Keith</td>
<td>Administration of Justice</td>
<td></td>
</tr>
<tr>
<td>HOLLAND, Carole</td>
<td>Mathematics</td>
<td></td>
</tr>
<tr>
<td>HOMME, Marcia C.</td>
<td>Marketing</td>
<td></td>
</tr>
<tr>
<td>HOYT, Richard V.</td>
<td>English</td>
<td></td>
</tr>
<tr>
<td>HUBBARD, Larry W.</td>
<td>Surveying</td>
<td></td>
</tr>
<tr>
<td>HUDSON, Linda L.</td>
<td>Child Development</td>
<td></td>
</tr>
<tr>
<td>HUMPHREY, Kevin D.</td>
<td>Apprenticeship 65</td>
<td></td>
</tr>
<tr>
<td>JACKSON, Frieda A.</td>
<td>German</td>
<td></td>
</tr>
<tr>
<td>JACKSON, Robert</td>
<td>Economics</td>
<td></td>
</tr>
<tr>
<td>JAGER, Carolyn</td>
<td>Child Development</td>
<td></td>
</tr>
<tr>
<td>JAGER, William J.</td>
<td>Child Development</td>
<td></td>
</tr>
<tr>
<td>JONES, Dean T.</td>
<td>Coach, Men's Basketball</td>
<td></td>
</tr>
<tr>
<td>JONES, Elizabeth J.</td>
<td>Psychology/Family Studies</td>
<td></td>
</tr>
<tr>
<td>JONES, William</td>
<td>Social Science</td>
<td></td>
</tr>
<tr>
<td>JUSTICE, Melinda</td>
<td>Child Development</td>
<td></td>
</tr>
</tbody>
</table>
KAVANAUGH, Nicholas E. .............................. Apprenticeship 65
KERFOOT, Michael G. .................................. Animal Science
KOENINGER, Betty E. ......................... Spanish
KROPP, Charles ......................................... Mathematics
LANSER, Mildred A. .................................. Office Training
LASTER, Lynne M. .................................. Child Development
LEHMAN, Elizabeth M. ............................ Child Development
LIGHTFOOT, Robb P. ..................................... Speech
LOKEN, Herbert ........................................ Executive Director of Alumni Association
LOVINGER, Jimmie L. .................................. Apprenticeship 60
LOWRY, Albert L. ........................................ Health Education
LUND, Elmore H. ........................................ Mathematics
MACKIE, Stuart ........................................ Data Processing
MAPES, Richard L. ........................................ Child Development
MARBLE, Daniel ........................................ Child Development
MARINEAU, Alexander P. .......................... Data Processing
MARION, William L. .................................. Data Processing
MASON, Susan Sefton .................................. Music
MATHENEY, Debra J. .................................. General Studies
MAURO, Ernest G. ........................................ Apprenticeship
MAWSON, George R. ................................ English
MCFARLAND, Debra Ann ................................ Interior Design
MCMILLON, Alton R. .................................. Fire Technology
MEADERS, William ........................................ Mathematics
MELSON, Jerry L. ........................................ Apprenticeship 60
METTLER, Mark Allen .................................. Mathematics
METZLER, Nancy ........................................ Accounting/Business
MICKOLS, Robert A. ................................... History
MILLER, Donald E. ........................................ Physical Education
MILLER, Edward E. ....................................... Administration of Justice
MILLER, Michael ....................................... Life Science
MOHENO, Yolanda P. .................................. Spanish
MOORE, Crystal ........................................ Psychology
MORLEY, Lucinda J. .................................... Real Estate
MORRIS, Raymond H. .................................. Apprenticeship 56
MOSLEY, Stanley J. ....................................... Administration of Justice
MURPHY, Anthony W. .................................. Physical Education
NELSON, Deanna L. .................................. Art
NEWBERRY, Paul A. .................................. Philosophy
NOBLE, Roger W. ........................................ Apprenticeship 65
OLOFSON, Ronald .................................. Mathematics
OLSON, Steve R. .................................... Computer Studies
O'HARA, JILL T. ........................................ Interior Design
O'REAR, Frances M. ................................ Senior Studies
OWENS-REID, Deborah ................................ Child Development
PAGAN, Ana R. ........................................ Management
PARKS, Cristen ........................................ Behavioral Science
ADMINISTRATION AND FACULTY

PARMLEY, Michael ........................................ Data Processing
PHILLIPS, Nancy J........................................... Nutrition, Interior Design
PICARD, Joyce A........................................... Senior Studies
PONEC, Beverly L........................................... Senior Studies
POWELL, Michael ........................................... Broadcasting
PRICE, Kent C............................................... Speech
RAHMAN, Shohreh Y........................................ Psychology, Counseling
RAINS, Bryan N............................................ Apprenticeship 60
RAPP, Donald .............................................. Agriculture
REES, Hazel M............................................. English
REID, Sean .................................................. Architecture
REPPERT, Donald M..................................... Music
RICE, Jeanne L........................................... Emergency Medical Training
RICE, Laura M............................................... Coach, Women's Tennis
RICHARDSON, John Nelson.............................. Art
RILES, Ruth M............................................ Sociology
ROBLES, Louis H........................................... Industrial Drawing
ROLOW, Mitchell E........................................ Apprenticeship 60
ROSICA, William J......................................... Industrial Drawing
ROSS, Richard R.......................................... Mathematics
ROWE, Jack L................................................ Mathematics
ROZELL, Mary E........................................... Data Processing
RUBERT, Milton ........................................... Apprenticeship 67
RUIZ, Joseph R........................................... Automotive
RUSSELL, Christine....................................... Counseling
SAINDON, John ............................................. History
SALAMACHA, Robert .................................... Business Education
SALES, Joseph M........................................ Real Estate, Economics
SCHAFER, Adelaide .................................... German
SCHIAVON, Sally ........................................ Health Careers
SCHMEIDER, Helene M................................ History
SCHUETTE, Dorothy ...................................... Psychology
SELF-McMILLIN, Tommie Sue.......................... Sociology
SHAIN, Arthur R........................................... Apprenticeship 57
SHERRILL, Sabrina...................................... Child Development
SIEMENS, Gary ........................................... Real Estate
SLOAN, Bradley L.......................................... Apprenticeship 65
SMALLHOUSE, Pam ....................................... Behavioral Science
SMITH, Donald W....................................... Business Education
SMITH, Elizabeth Ann .................................... Clothing, Family Studies
SMITH, Freddie H.......................................... Physical Education
SMITH, George C.......................................... Management
SMITH, Glenn D.......................................... Apprenticeship 59
SMITH, Joyce A........................................... Physical Education
SMITH, Lenore C........................................... Physical Education
SNYDER, Edward C........................................ Data Processing
SOLARI, Eve-lyne C...................................... Physical Education
<table>
<thead>
<tr>
<th>Name</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>STACEY, Richard T.</td>
<td>Fire Technology</td>
</tr>
<tr>
<td>STECKI, Edward R.</td>
<td>Sociology</td>
</tr>
<tr>
<td>STEELMAN, Roger</td>
<td>Industrial Drawing</td>
</tr>
<tr>
<td>STEITZ, Joyann D.</td>
<td>Senior Studies</td>
</tr>
<tr>
<td>STENERG, V. Ruth</td>
<td>Biology</td>
</tr>
<tr>
<td>STEVENS, Barbara</td>
<td>Work Experience</td>
</tr>
<tr>
<td>STONE, Corinne K.</td>
<td>Office Training</td>
</tr>
<tr>
<td>STROME, Paula R.</td>
<td>Mathematics</td>
</tr>
<tr>
<td>SUDERMAN, Charles J.</td>
<td>Apprenticeship</td>
</tr>
<tr>
<td>SUMMERFORD, Sharon Gail</td>
<td>Child Development</td>
</tr>
<tr>
<td>SWANSON, Barbara L.</td>
<td>English</td>
</tr>
<tr>
<td>TALLMAN, Ralph W.</td>
<td>Apprenticeship 65</td>
</tr>
<tr>
<td>TAMBLIN, Lawrence T.</td>
<td>Data Processing</td>
</tr>
<tr>
<td>TAMEZ, Jose</td>
<td>Spanish</td>
</tr>
<tr>
<td>TEASLEY, J.B.</td>
<td>Mathematics</td>
</tr>
<tr>
<td>TIZIANI, Erwin J.</td>
<td>Food Service</td>
</tr>
<tr>
<td>TUCKER, Michael</td>
<td>Mathematics</td>
</tr>
<tr>
<td>TURNER, James B.</td>
<td>Physical Education</td>
</tr>
<tr>
<td>URBINA, John R.</td>
<td>Apprenticeship 55</td>
</tr>
<tr>
<td>VAN ALSTINE, Magan</td>
<td>Psychology</td>
</tr>
<tr>
<td>WAIDELICH, Michael R.</td>
<td>Administration of Justice</td>
</tr>
<tr>
<td>WALTERS, Fay</td>
<td>Office Training</td>
</tr>
<tr>
<td>WEIR, Kenton A.</td>
<td>Computer Science</td>
</tr>
<tr>
<td>WHITE, Nita L.</td>
<td>Reading</td>
</tr>
<tr>
<td>WIEBER, Gene D.</td>
<td>English</td>
</tr>
<tr>
<td>WONG, Wayne D.</td>
<td>Institutional Management</td>
</tr>
<tr>
<td>YATES, Michael A.</td>
<td>Air Conditioning/Refrigeration</td>
</tr>
</tbody>
</table>
INDEX

A
Abbreviations 65
Absences 33
Academic Computing Center 16
Academic Eligibility 20
Academic Probation 31
Academic Regulations 28
Academic Renewal 32
Accounting
Courses 122
Program 119
Accounting Clerk “Fast Track” 118
Accreditation 14
Adding Classes 33
Additional Associate Degrees 54
Administration, College 396
Administration of Justice
Courses 359
Program 357
Admission Procedures 20
Advanced Placement Program 30
Aeronautics
Courses 278
Program 271
Affirmative Action Statement 7
Agriculture
Courses 79
Department 67
Two + Two Certificate 67
Agricultural Business Management
Certificate 69
Courses 77
Program 71, 75
Agriculture Mechanics
(See Mechanized Agriculture) 85
Air Conditioning & Refrigeration 279
Anatomy 303
Animal Science
Certificate 69
Courses 80
Program 72, 76
Anthropology 106
Application for Admission 21
Apprenticeship
Program 276
Architectural Drafting 335
Architecture
Courses 339
Program 326
Art
Courses 93
Program 93
Assessment Policy/Learning
Physically Disabled Students 23
Associate Degree Programs 49
Additional Associate Degrees 54
Associate in Arts Degree 49
Associate in Science Degree 51
Associated Students 43
Astronomy 341
Athletics-Men 260
Athletics-Women 261
Attendance 33
Auditing a Course 28
Auto Courses 279
Auto Brakes & Wheel Alignment
Certificate 266
Auto Engine Overhaul
Certificate 267
Auto Tune-up & Emission Control
Certificate 268
Automatic Power Trains
Certificate 267
Automotive Technology
Program 271
B
Baccalaureate Level Courses 65
Bacteriology
Courses 303
Program 300
Banking and Finance
Courses 124
Program 119
Behavioral Sciences
Courses 106
Program 105
Biology
Courses 303
Program 300
Black Studies 182
Board of Trustees 3
Bookkeeping Certificate 114
Broadcasting
Courses 146
Program 144
Business 114
Courses 125
“Fast Track” Programs 118
Business Administration
Courses 127
Program 120

C
Cabinetmaking
Certificate 268
Courses 292
Calendar 6
CAN System 45
Career Programs 63
Certificates of Achievement 64
Listing 58
Certificate of Completion 63
Changes of Personal Data 35
Chemistry
Courses 342
Program 329, 336
Chicano Cultural Center 43
Chicano Studies
Courses 183
Chief Officer Certification (Fire) 356
Child Development
Courses 197
Program 192, 194
Children’s Center
Permit Program 195
Clerk/Typist “Fast Track” 118
Clinical Laboratory Assistant 301
Clothing/Textiles Certificate
(See Fashions) 190
Clubs 43
College Administration 396
College Assessment Program 23
College Level Examination Program (CLEP) 30
College Transcripts 36
Communications 144
Community Services 15
Competency Requirements 48
Completing Registration 24
Computer Aided Manufacturing
Certificate 269
Courses 287
Computer Information Systems
Certificate 155
Courses 158
Program 155, 156
Computer Science
Certificate 155
Courses 158
Program 158
Computer Studies
Courses 158
Department 155
Conduct 34
Construction Technology 282
Consumer Education 204
Continuing Education 14
Continuous Enrollment 49
Cook Apprentice Certificate 188
Cooperative Work Exp. Educ. 17
Correctional Administration
Courses 364
Program 358
Cosmetology
Certificate 188
Courses 204
Counseling 38
Courses 170
Staff 396
Course Audit Fee 25
Course Classification System 65
Course Descriptions 64
Course Numbering 65
Course Reptition 32
Credit by Examination 30
Credit/No Credit Grade 28
Credit, Unit of 28
Crop Science
Certificate 69
Courses 82
Program 72, 76
Culinary Arts
Certificate 189
Courses 208
Program 193

Data Processing
Courses 162
Dean's List 35

Degrees
Associate in Arts 49
Associate in Science 51

Delano Center 17
Dental Assisting
Courses 245
Program/Admissions 232

Dietary Manager's Certificate 189
Disqualification 31
Dormitories 39

Drafting 347
Drama (See Theatre Arts) 387
Drop Fees 26

Economics 379
Electronics Mathematics 284
Electronics Technology
Certificate 269

Emeritii 397
Employment (Student) 40
Off-campus 40
On-campus 40

Engineering
Courses 343
Program 329

English
Classifications 64
Requirement 173

French as a Foreign Language 179
Placement Test 179
English Classification Test 64
Enrollment Fees 24
Entomology 84
Environment 306
Equal Opportunity 7
Ethnic Studies 187
Examinations 34
Excuse for Absence 33

Expenses
Tuition 24
Explanation of College Terms 9

Faculty
Adjunct Faculty 412
Fairness Procedures 34
Family & Consumer Education
Department 187
Family & Consumer Studies 193
Family Studies 206
Fashions/Textiles 190
Certificate 190
Courses 207
“Fast Track” Certificates 118
Accounting/Payroll Clerk 118
Clerk/Typist 118

Fees
Course Audit Fee 25
Enrollment Fee 24
Health Fee Exempt Procedure 25
Health Fee Refund Procedures 26
Miscellaneous Fees 25
Non-Resident Tuition 25
Refunds 26
Student Health Fee 25

Filipino 218
Final Examinations 34
Financial Assistance 41
Fire Officer Certification 356
Fire Technology
Certificate 355
Courses 366
Program 358
Food Service/Culinary Arts 208
Food Service Management
Certificate 189
Courses 208
Program 193
Foreign Language
Courses 218
Program 217
Forestry
Certificate 70
Courses 84
Program 73, 76
French 218

G
General Education 48
Requirements-CSU 56
General Office Certificate 115
General Studies Courses 224
Geography 345
Geology
Courses 345
Program 337
German 219
Grade Changes 35
Incomplete 29
Withdrawn 29
Grade Points 28
Grade Reports 35
Grades
Audit 28
Credit/No Credit 28
In Progress 29
Incomplete 29
Report Delayed 30
Withdrawn 29
Graduation with Honors 35
Graduation Requirements 48
Grants 42
Grievance Procedures 34

H
Handicap (See Supportive Services Center) 15
Health Careers
Admissions 231
Courses 248
Health Education 259
Health & Physical Education 258
Health Science 306
Health Services 39
History 380
History of College 12
Holds on Records and Registration 36
Horticulture
Course 85
Program 73
Housing 39

I
Illness 33
Incomplete Grade 29
Industrial Drawing
Courses 347
Program 338
Industrial Technology
Courses 285
Programs 276
Insurance 128
Intercollegiate Athletics 260
Interior Design
Certificate 190
Courses 212
Program 194
International Student Center 44

J
Journalism
Courses 147
Program 144

L
Late Entrance 33
Latin 220
League for Innovation 14
Learning Center 15, 294
Learning Skills
For EFL 180
Courses 295
Legal Secretary Certificate 115
Library 15, 292
Library Regulations 34
Licensed Vocational Nursing
Courses 255
Program/Admissions 244
Life Science 300
Loans, Student 42
Machine Tool Metalworking
Certificate 269
Courses 287
Machine Tool Technology
Certificate 269
Courses 287
Program 273
Makeup for Absence 33
Management 129
Management/Public Admin.
Certificate 116
Map, Campus 4
Marketing 132
Martin Luther King, Jr. Center 44
Mathematics
Classifications 64
Courses 308
Program 308
Math for Electronics 284
Mechanical Technology 288
Mechanized Agriculture
Certificate 70
Courses 85
Program 74, 77
Medical Science 249
Meteorology 349
Military Credit 31
Minimum Study Loads 24
Mission Statement 12
Multicultural Advancement Project 43
Music
Courses 314
Program 313
Natural Resources Management 87
Non-Discrimination Statement 7
Non-Resident Tuition 24
Nursing
LVN 241
RN 238
Nutrition 215
Office Training 133
Open Access 7
OPTIONS Program 319
Organization of College 12
Ornamental Horticulture
Certificate 71
Courses 87
Program 74, 77
Parole 357
Petroleum Technology
Certificate 270
Courses 288
Program 273
Philosophy
Courses 321
Program 321
Photography
Certificate 92
Courses 101
Press Photography 148
Physical Education
Courses 259
Program 258
Requirements 258
Physical Science
Courses 339
Department 325
Physics
Courses 350
Program 334
Physiology 306
Placement (Employment) 40
Planetarium 17
Political Science 383
Preliminary Academic Planning 23
Pre-Professional Programs 63
Pre-School Teaching 196
President’s Scholars 35
Pre-Veterinary Medicine
Program 75
Primary Care Associate
Program 234
Probation 31
Academic Probation 31
Removal from Probation 31
Disqualification 31
Reinstatement 32
Probation-Parole 357
<table>
<thead>
<tr>
<th>Programs of Study</th>
<th>58</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progress Probation</td>
<td>31</td>
</tr>
<tr>
<td>Psychology</td>
<td>107</td>
</tr>
<tr>
<td>Public Service</td>
<td>354</td>
</tr>
</tbody>
</table>

### R
- **Radiologic Technology**
  - Courses: 249
  - Program/Admissions: 236
- **Reading**
  - Classifications: 64
  - For EFL: 179
- **Real Estate, California Certificate**
  - Courses: 115
  - Program: 138
  - Program: 120
- **Recreation Program**
  - Courses: 258
- **Re-entry/Resource Center**
  - Courses: 45
- **Refrigeration**
  - Courses: 279
- **Refunds**
  - Courses: 26
- **Registered Nursing**
  - Courses: 252
  - Program/Admissions: 238
- **Registration Procedures**
  - Courses: 20
- **Reinstatement**
  - Courses: 31
- **Repeating a Course**
  - Courses: 32
- **Reporting Illness**
  - Courses: 33
- **Residence Determination**
  - Courses: 21
- **Residence Eligibility**
  - Courses: 20
- **Residence Halls**
  - Courses: 39

### S
- **Schedule of Classes**
  - Courses: 36
- **Scholarships**
  - Courses: 42
- **Secretarial Certificate**
  - Courses: 116
- **Secretarial, Legal, Certificate**
  - Courses: 115
- **Secretary/Word Processor Program**
  - Courses: 121
  - Courses: 133
- **Senior Citizen's Program**
  - Courses: 16
- **Senior Studies**
  - Courses: 377
- **Sexual Harassment Policy**
  - Courses: 46
- **Shorthand**
  - Courses: 137
- **Sign Language Program**
  - Courses: 145
- **Small Business Certificate Courses**
  - Courses: 117
- **Social Security**
  - Courses: 40
- **Social Science/International Education**
  - Courses: 379
- **Sociology**
  - Courses: 110
- **Spanish**
  - Courses: 220
- **Special Education Courses**
  - Courses: 148
  - Program: 145
- **Speech**
  - Courses: 385
  - For EFL Students: 150
  - Program: 145
- **State Colleges**
  - Courses: 55
- **Student Activities**
  - Courses: 43
- **Student Centers**
  - Courses: 43
  - Chicano Cultural Center: 43
  - International Student Center: 44
  - Martin Luther King, Jr., Center: 44
  - Multicultural Advancement Proj.: 43
  - Re-entry/Resource Center: 45
  - Transfer Center: 45
- **Student Government**
  - Courses: 43
- **Student Health Fee**
  - Courses: 25
- **Student Matriculation Plan**
  - Courses: 22
- **Student Organizations**
  - Courses: 43
- **Student Services**
  - Courses: 38
- **Student Residence**
  - Courses: 21
- **Study Load**
  - Courses: 24
- **Summer Session**
  - Courses: 14
- **Supportive Services Center**
  - Courses: 15
- **Surveying Program**
  - Courses: 272
  - Courses: 289

### T
- **Table of Contents**
  - Courses: 2
- **Telephone Directory**
  - Courses: 8
- **Television**
  - Courses by Television: 14
- **Theatre Arts**
  - Courses: 388
  - Program: 387
  - Transcripts: 36
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer</td>
<td>54</td>
</tr>
<tr>
<td>Independent Schools</td>
<td>55</td>
</tr>
<tr>
<td>State Universities</td>
<td>55</td>
</tr>
<tr>
<td>University of California</td>
<td>55</td>
</tr>
<tr>
<td>Transfer Center</td>
<td>45</td>
</tr>
<tr>
<td>Transfer Credit</td>
<td>54, 65</td>
</tr>
<tr>
<td>Tuition</td>
<td>24</td>
</tr>
<tr>
<td>Two + Two Certificate (Ag)</td>
<td>67</td>
</tr>
<tr>
<td>Typing</td>
<td>133, 136</td>
</tr>
<tr>
<td><strong>U</strong></td>
<td></td>
</tr>
<tr>
<td>Unit of Credit</td>
<td>28</td>
</tr>
<tr>
<td>University of California</td>
<td>55</td>
</tr>
<tr>
<td>Use of College Facilities</td>
<td>16</td>
</tr>
<tr>
<td><strong>V</strong></td>
<td></td>
</tr>
<tr>
<td>Veterans</td>
<td>41</td>
</tr>
<tr>
<td>Verification of Enrollment</td>
<td>36</td>
</tr>
<tr>
<td>VN to RN Program</td>
<td>240</td>
</tr>
<tr>
<td>Transfer and Challenge Policy</td>
<td>243</td>
</tr>
<tr>
<td>Vocational Nursing</td>
<td></td>
</tr>
<tr>
<td>Courses</td>
<td>255</td>
</tr>
<tr>
<td>Program</td>
<td>244</td>
</tr>
<tr>
<td>Vocational Rehabilitation Aid</td>
<td>40</td>
</tr>
<tr>
<td><strong>W</strong></td>
<td></td>
</tr>
<tr>
<td>Water Technology</td>
<td>352</td>
</tr>
<tr>
<td>Weill Institute</td>
<td>17</td>
</tr>
<tr>
<td>Welding</td>
<td></td>
</tr>
<tr>
<td>Certificate</td>
<td>271</td>
</tr>
<tr>
<td>Courses</td>
<td>290</td>
</tr>
<tr>
<td>Program</td>
<td>275</td>
</tr>
<tr>
<td>Withdrawal</td>
<td></td>
</tr>
<tr>
<td>From College</td>
<td>33</td>
</tr>
<tr>
<td>From Courses</td>
<td>33</td>
</tr>
<tr>
<td>Woodworking</td>
<td></td>
</tr>
<tr>
<td>Courses</td>
<td>292</td>
</tr>
<tr>
<td>Program</td>
<td>275</td>
</tr>
<tr>
<td>Word Processing</td>
<td></td>
</tr>
<tr>
<td>Certificate</td>
<td>117</td>
</tr>
<tr>
<td>Courses</td>
<td>134</td>
</tr>
<tr>
<td>Work Experience</td>
<td>293</td>
</tr>
</tbody>
</table>