

BAKERSFIELD COLLEGE

2001-2002 CATALOG

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Bakersfield College reserves the right to modify its programs, tuition and fees, admission and graduation requirements, schedules and other policies, procedures and regulations stated in this catalog without notice.

Bakersfield College



Welcome to Bakersfield College. Now more than ever it is important that each of us has the tools, skills, ability and knowledge necessary to succeed in today's world. Bakersfield College gives you those tools, whether your educational goal is to receive an associate degree, to transfer to a university, to prepare for an occupational certificate or just take a few classes. In this catalog you will find information about the outstanding educational programs and student services offered at Bakersfield College.

The mission of Bakersfield College is to empower our students to succeed. Everyone at Bakersfield College is dedicated to achievement of that goal. You will receive direction, opportunity and knowledge in the field of study you choose. And, you will be provided with a variety of support services to help you succeed.

Wishing you an exciting and fulfilling learning experience,

A handwritten signature in cursive script that reads "Sandra V. Serrano".

*Sandra V. Serrano
President*



KERN COMMUNITY COLLEGE

District Administration
Chancellor
Walter Packard

BOARD OF TRUSTEES

Rose Marie Bans
Dennis L. Beebe
Herbert D. Bonds
Pauline F. Larwood
Mary C. Lattig
Kevin O. McCarthy
John A. Rodgers

ACADEMIC CALENDAR

Fall Semester 2001 (August 20 - December 21)

August 13 – In-Person Registration For Courses Requiring Instructors' Signatures Begins
August 16 – No Registration Available
August 20 – Instruction Begins
August 20 – Late Registration Begins
August 31 – *Last Day for a Refund for **Semester-Length Classes**
September 3 – Labor Day Holiday
September 7 – Last Day to Add a **Semester-Length Class** with Approved Add Form
September 21 – *Last Day to Drop From a **Semester-Length Class** Without Receiving a “W”
November 1 – Last Day to File for Graduation
November 12 – Veterans' Day Holiday
November 22-23 – Thanksgiving Holidays
November 26 – *Last Day to Withdraw From a **Semester-Length Class** and Receive a “W”
December 14-21 – Final Examinations
December 21 – End of Fall Semester
December 24 – January 1 - Winter Recess

Spring Semester 2002 (January 14 - May 23)

January 7 – In-Person Registration For Courses Requiring Instructors' Signatures Begins
January 10 – No Registration Available
January 14 – Instruction Begins
January 14 – Late Registration Begins
January 21 – Martin Luther King, Jr., Day Holiday
January 25 – *Last Day for a Refund for **Semester-Length Classes**
February 1 – Last Day to Add a **Semester-Length Class** with Approved Add Form
February 19 – *Last Day to Drop From a **Semester-Length Class** Without Receiving a “W”
February 15 – Lincoln Day Holiday
February 18 – Washington Day Holiday
March 25-29 – Spring Recess
April 1 – Last Day to File for Graduation
April 26 – *Last Day to Withdraw From a **Semester Length Class** and Receive a “W”
May 16-23 – Final Examinations
May 23 – End of Spring Semester
May 23 – Commencement

***In courses other than semester length, the Office of Admissions and Records or the instructor should be consulted regarding drop, withdrawal and refund deadlines.**

Affirmative Action/Equal Opportunity Statement

In accordance with the requirements of the Civil Rights Act, Bakersfield College provides services and benefits to students regardless of race, color, national origin, ancestry, gender, age, religion, marital status, medical condition or disability. The lack of English language skills will not be a barrier to administration and participation in vocational education programs. (Title VI and 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.)

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.

A complaint of alleged discrimination may be filed within one year of the alleged discrimination. For complaint forms or additional information, contact one of the following:

Rosella Marilao
Director of Human Resources
Title IX Coordinator
Levinson Hall; (661) 395-4435

Dean of Students
McCuen Hall 8; (661) 395-4614

Tim Bohan
Disabled Student Programs and Services
FACE 16; (661) 395-4334

Charles West
Work Experience and Job Placement
Student Services 27; (661) 395-4550

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:

Diane Clerou
Assistant Chancellor, Human Resources Services
Kern Community College District
2100 Chester Avenue
Bakersfield, CA 93301
(661) 395-4106

Declaración De Acción Afirmativa/Igualdad de Oportunidad

De acuerdo con los requisitos de la acta de derechos civiles, Bakersfield College provee servicios y beneficios a todos estudiantes sin impedimento de raza, color, origen nacional, ancestría, género, edad, religión, estado civil, condición marital, o impedimento. La falta de capacidad de hablar inglés no será un obstaculo par la admisión vocacionales. (Titulo VI y VII del Acto Civilde Derechos Civiles de 1974; Titulo IX de los Enmiendas de Educacion de 1972; las Secciones 503 y 504 del Acto de Rehabilitacion del 1973, como modificado.)

Toda persona tiene el derecho de solicitar admisión y completar un programa educativo en Bakersfield College. No se tolerada interferencia alguna con el acceso y termino exitoso de su educación a ninguna persona o estudiante por medio de conducta discriminatoria ilegal. El colegio iniciara acción disciplinaria contra las personas que sean descubiertas interfiriendo con la educacion de los estudiantes por medio de cualquier forma de intimidacion ilegal o inmoral.

Una queja de discriminación supuesta se puede ser registrada dentro del termino de un ano de ocurrida la supuesta discriminación. Para obtener formas de quejas o información adicional usted puede ponerse en contacto con la siguiente persona:

Manuel Gonzales
Campus Center
(661) 395-4532

Para preguntas adicionales referente a las leyes accion afirmativa y igualdad de oportunidad, ya sean al nivel federal, estatal, o local, y referente a la politica del consejo de gobierno de Bakersfield College o del Distrito Escolar de La Comunidad de Kern, puede ponerse en contacto con siguiente oficina:

Diane Clerou
Assistant Chancellor, Human Resources Services
Kern Community College District
2100 Chester Avenue
Bakersfield, CA 93301
(661) 395-4106

**Access to and Confidentiality of Student Records:
Privacy Act**

Student records are protected by the Family Educational Rights and Privacy Act, state law and Kern Community College District Board Policy from access by casual or unauthorized persons. Access to records is provided to the student, appropriate college staff members, persons having written consent of the student, or by court order or subpoena.

The Privacy Act affords Bakersfield College the right to release such “directory information” as the student’s name, address, e-mail address, photographs, telephone number, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended.

Present and former BC students are given the right to inspect, review and challenge the contents of all educational records related to them. No information contained in their educational records may be released without their consent, except to those agencies or individuals authorized by the Act.

Students wishing to inspect, review, or challenge any of their educational records must make a request in writing to the Dean of Students.

Copies of the Bakersfield College and KCCCD Board Policy are available in the Office of Admissions and Records.

Telephone Directory

Academic Senate 395-4300

Administration

President 395-4211
 Vice President, Instruction 395-4305
 Vice President, Student Services 395-4204

Admissions and Records

Admissions-Registration 395-4301
 Transcripts 395-4388
 Telephone & Web Registration Assistance 395-4200

Financial Aid

Financial Aid 395-4427
 EOPS 395-4351

Campus Security

24 Hours Per Day 395-4554

Student Services

Assessment Center 395-4479
 Athletic Director 395-4266
 Bookstore 395-4506
 Career Center 395-4083
 Chicano Cultural Center 395-4532
 Counseling 395-4421
 Delano Community Campus 725-8020
 Distance Learning 395-4093
 Health Services 395-4336
 International Student Center 395-4419
 Learning Center 395-4433
 Library 395-4461
 Lost and Found 395-4355
 Martin Luther King, Jr. Center 395-4570
 Placement-Employment 395-4061
 President's Scholars/President's Re-Entry Scholars . 395-4614
 Re-Entry Center 395-4582
 Scholarships 395-4427
 Student Activities 395-4355
 Supportive Services (disabled students programs
 and services) 395-4334
 Transfer Center 395-4288
 Tutorial Center 395-4430
 Veterans Affairs 395-4414
 Workability III 395-4070

Community Services

Use of College Facilities 395-4518
 Community Services Classes and Tours 395-4137
 Ticket Office 395-4326

Academic Offices

Academic Development 395-4433
 Agriculture 395-4527

Allied Health 395-4281
 Applied Science & Technology 395-4571
 Art 395-4404
 Behavioral Science 395-4511
 Biological Science 395-4401
 Business Education 395-4272
 Chicano Studies 395-4584
 Communications 395-4404
 Computer Studies 395-4470
 English 395-4585
 Family & Consumer Education 395-4561
 Health & P.E. 395-4266
 Mathematics 395-4231
 Music 395-4404
 Philosophy 395-4585
 Physical Science 395-4224
 Public Administration 395-4481
 Social Science 395-4584
 Theatre Arts 395-4548
 Work Experience 395-4550

Bakersfield College online www.bakersfieldcollege.org

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.

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

Assessment: The process of collecting student information through standardized tests, academic transcripts, surveys, and interviews for the purpose of assisting students with the development of educational plans.

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

Catalog Rights: Refers to the right of the student to elect to meet the graduation requirements in effect the academic year of first enrollment, as long as continuous enrollment is maintained, or at the time of graduation. Catalog rights apply only to Bakersfield College graduation and program requirements. If other institutions change their requirements for entrance, graduation, satisfaction of general education patterns or in other ways, it may be necessary for the student to meet the new requirements upon transfer, even if continuous enrollment has been maintained.

Class Schedule: The listing of courses including hours, instructors, and room assignments offered each semester.

Community Service Classes: Fee-funded avocational and recreational classes. These classes carry no credit value.

Credit Course: Courses for which units are granted.

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.

Electives: Courses taken 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.

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

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.

Open Entry/Open Exit Labs: Open entry labs allow a student to enroll in a class any day or evening throughout the school year and to finish a course any time during the school year. Open-entry courses can be identified by a course number in the 200s.

Placement: The process of advising a student to enroll in a particular course based on valid prerequisites, valid standardized tests, and other multiple measures.

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

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.

Student Education Plan: A plan developed for each student which identifies the student's educational objectives and the courses, services, and programs to be used to achieve them. These plans are to be on file in the Counseling Center.

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

THE 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 153-acre main campus on Panorama Drive in 1956. Bakersfield College offers courses at its satellite campuses located in downtown Bakersfield at the Weill Institute, Delano Center Campus and three other instructional sites in Kern County. Bakersfield College has continued to grow and to meet the educational needs of Kern County.

Organization

Bakersfield 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, joined in 1973.

Beliefs

We believe:

- Students are the primary reason for our existence.
- Education is life changing for generations.
- Lifelong learning is the cornerstone for personal growth.
- Both tradition and innovation are valued.
- Excellence is our standard.
- Everyone is accountable.
- We are interdependent with our community.
- Teamwork is essential.
- Diversity is a resource and broadens our perspective.
- Everyone deserves respect.
- Success is measured by the people we serve.

Vision

Bakersfield College will be known for its excellence. We will collaborate in community development, foster cooperative efforts and cultivate partnerships. We will ensure student success through innovation and high standards of service and achievement. Our success will be measured by the individuals and communities we serve.

Mission

The mission of Bakersfield College is to empower our students and community to succeed by providing exceptional instruction and services in a supportive environment.

Division of Institutional Development and Foundation

History and Purpose

The Office of Institutional Development and Foundation exists to support Bakersfield College in the following areas: development of resources and community and business partnerships, the development and dissemination of accurate and timely marketing and public information, enhancement of the institution's image, public-policy analysis, advocacy and support, production of communications that meet the infor-

mational needs of the institution and support of the athletic development program.

The units within the Division that work towards this end are: The Office of Institutional Development, the Bakersfield College Foundation, the Office of Marketing & Public Relations, the BC Graphics Center, the BC Athletic Development Division, the Alumni Association. Two units that are currently under development are Grants Management and Writing, and Governmental Relations.

The Bakersfield College Foundation exists to promote, develop and collaborate on behalf and for the general welfare of Bakersfield College. The Foundation generates impressive support from the community in the form of contributions, service on the Foundation Board of Directors and in general support of the college.

The Foundation's activities are accounted for in a series of funds categorized as: unrestricted funds, restricted program funds, student loan and scholarships, endowment, annuity and life income funds, and trust and agency funds. Total 1999/2000 Foundation assets equaled \$3.4 million of which the majority is invested in bonds, equities and short-term notes. Income is derived from investment earnings, contributions, dues, and program income. Expenditures are primarily incurred for program expenses, scholarships, loans, awards, public relations and general operating expenses.

The Foundation maintains over 300 scholarships to encourage students, including programs such as the President's Scholars. The Foundation manages several endowments and gifts and is currently developing an annuities infrastructure program. The Foundation also assists Bakersfield College students, administration, faculty and staff in the attainment of the college and community's educational goals.

Friends and supporters of Bakersfield College are invited to support the Foundation and its activities. The Foundation Offices are located at Bakersfield College in the Administration Building, Room 6, 1801 Panorama Drive, Bakersfield, California, 93305. Telephone (661) 395-4273. Website address: www.bc.cc.ca.us/foundation.

Precollegiate Courses Philosophy Statement

Many students have the ability to succeed in college but for a variety of reasons may not yet have the necessary skills to do so. The Bakersfield College staff determines the skills necessary for success in college-level courses and provides the appropriate courses which will help students develop those skills.

The precollegiate skills program at Bakersfield College has been carefully developed to help these students succeed in college. When needed, the program is the final phase of an educational continuum which takes the student from elementary levels of reading, writing, and mathematics to entry-level college courses. To help the student, the staff must first assess

the student's level of skills in critical thinking, writing, reading, mathematics, and study techniques and thus determine whether assistance is necessary. When a student's needs have been identified, the college will provide counseling to assist the student in developing an appropriate education plan.

With some exceptions, state regulations set a maximum of 30 units for precollegiate basic skills courses taken by any student. If a student's skills are such that more than 30 units will be required to reach college level, that student will be counseled regarding other possible ways to build those skills. The student may be assured, however, that Bakersfield College will coordinate carefully with other educational institutions so that the student can make a smooth transition at Bakersfield College into the program of his/her choice. Once students are properly placed in classes, they will have access to regular counseling to monitor and guide their progress.

The Bakersfield College precollegiate program seeks to advance students toward their goals as effectively and efficiently as possible. The Bakersfield College staff is dedicated to assisting this process in every possible way.

Two Categories of Precollegiate Courses: Precollegiate-Discipline Specific

These include courses that offer preparatory instruction for specific academic or vocational areas. They may incorporate basic skills instruction but with direct application of the basic skills for those subject areas.

Precollegiate-Basic Skills

These include courses that teach fundamental skills in reading, writing, computation, and study skills which are applicable to any area of academic concentration.

Exempted from the 30-unit limitation referred to above are the following students: Those currently enrolled in one or more courses of English as a Second Language and those identified as having a learning disability.

Accreditation

Bakersfield College, approved by the Chancellor of the California Community Colleges, is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, 3402 Mendocino Avenue, Santa Rosa, California 95403, an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education. 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, the California State University System, and other colleges and universities give full credit for appropriate courses completed at Bakersfield College.

Evening and Weekend Program

Continuing education classes are offered by Bakersfield College at convenient times during the day and evening, both on and off campus. These are regular college courses, which carry the same requirements and credits as other courses. Many evening classes are offered one night per week for two or three hours, Monday through Thursday. Weekend classes are also scheduled during the fall and spring semesters. It is possible for a student to meet all requirements for graduation through continuing education classes.

Adult education, non-credit and contract education courses are offered by the college to meet particular or special community needs.

Distance Learning

Distance Learning at Bakersfield College consists of courses offered from a variety of disciplines using three different delivery methods: telecourse (ITV), interactive television, and online instruction.

The growing Distance Learning program provides educational options to anyone seeking a second chance at a college education; students dealing with time limitations or transportation difficulties, and individuals willing to explore a less traditional presentation of course content. Since 1992, Bakersfield College has expanded its telecourse offerings to provide greater access for students in its service area. Telecourses are broadcast from Bakersfield College via the Kern County Superintendent of Schools, KETN. The broadcast service area is reached via Time-Warner Cable, Cox Cable, and PopVision. KETN is available to Time-Warner cable subscribers in Tehachapi on Mountain Cable in Frazier Park.

Since 1996-97 Bakersfield College has offered interactive courses from the distance learning classroom located on the main campus to the; Delano Community Campus, 35 miles north of Bakersfield at 1942 Randolph St. In addition, two-way audio and video capabilities to the Delano Sears Logistics Center are also available, as well as connectivity to CSUB and Cerro Coso College.

Since Fall 1997 Bakersfield College has offered a variety of online courses, allowing students to take classes free of any geographic boundaries. Students need access to a computer with connections to the Internet.

Information about the Instructional Telecourse program can be obtained by calling (661) 395-4093. Specific information about online course offerings are available on the Bakersfield College website: www.bakersfieldcollege.org. Opportunities for students in the Delano area are provided through various live interactive courses. Information on all these courses can be obtained from the Distance Learning Office, (661) 395-4694, e-mail: klomis@bc.cc.ca.us.

Summer and Winter Intersessions

The college conducts summer and winter intersessions. Day, evening, and weekend classes are scheduled during both of these sessions.

Community Education And Services

Community Education and Services offers many activities such as recreational classes, self and professional development seminars, planetarium lectures 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 all costs of instruction.

Grace Van Dyke Bird Library

The Grace Van Dyke Bird Library provides access to information in a variety of ways and formats. There are over 80,000 books in the collection, as well as over 300 periodical titles and five different newspaper subscriptions. An integrated library automation system aids in acquisition, cataloging, serials control, circulation and locating items. The Public Access Catalog (PAC) allows users to find items in the main, reference, and reserve collections. Online periodical database searches are also available. Reference librarians will assist with PAC, database, and Internet searches, as well as traditional print sources of information.

Other services available to all library users include:

- Individual carrels for quiet study
- Task rooms for group work (schedule at circulation desk)
- Classroom facilities (schedule at circulation desk)
- Photocopying & computer printing (fee for use)
- Interlibrary loan
- Internet access
- Telephone reference service (395-4466)
- Orientation sessions (arrange with Reference Services)

All community members may use the Grace Van Dyke Bird Library. Students and staff use the Gades Card for library access. Other residents should inquire at the circulation desk for details.

Library Hours

Monday-Thursday – 8:00 a.m.-8:45 p.m.

Friday – 8:00 a.m. - 4:45 p.m.

Saturday – 9:00 a.m. - 4:45 p.m.

Sunday – 11:00 a.m. - 4:45 p.m.

Summer Session and holidays as posted

Jerry Ludeke Learning Center

The Learning Center, on the second and mezzanine floors at the west end of the Student Services Building is comprised of various learning devices and well-trained instructors and tutors. The center offers tutorial services; reading and writing classes; learning and study skills courses; open-entry math classes; a basic skills computer lab; and testing, evaluation, services and courses for students with disabilities. For students who wish to improve their memory, note-taking or

test-taking skills, the Learning Center has short-term classes in these and other study skills subject areas.

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

Supportive Services Center (Disabled Students Programs and Services)

The purpose of Supportive Services is to ensure access to the college and its programs, and to provide academic accommodations and support services for students with disabilities. The program provides services for students with physical disabilities (including temporary disabilities), psychological disabilities, learning disabilities, speech and language disorders, students who are blind or have visual impairments, students who are deaf or hard of hearing, and students with health limitations.

Special services include counseling, registration assistance, learning disabilities assessment, tutoring, mobility assistance, sign language interpretation and reader services, alternative testing arrangements and note-taking assistance. Special equipment is available such as tape recorders, assistive listening devices, books in alternate formats (Braille, large print, tape) and assistive computer technology. Special classes are available in English, Reading, Mathematics, Assistive Computer Technology, and Adaptive Physical Education. All facilities are accessible and services are tailored to meet individual needs. The Office of Supportive Services is located in FACE 16 (see Workability III).

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.

Computer Studies

Some of the most promising career opportunities of the present and future are in the areas of computer systems analysis, networking, programming, applications 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 campus and Information Services staff who aid faculty in the development of academic computing applications.

Information Services

Information Services directs the operation of the academic computing equipment and software at Bakersfield College. This equipment now includes a substantial number of microcomputers and networks. Most college programs make use of this equipment.

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.

Use of College Facilities

Any group desiring to use facilities at Bakersfield College for other than instructional purposes should contact the Event Scheduling Office (tblair@bc.cc.ca.us, phone: 395-4518, fax 395-4744). Campus groups should make requests using the web address. Community groups may also make requests using the web address, however fax or mail is also acceptable. The department assistant will help you in scheduling facilities for lectures, seminars, meetings, conferences and sporting events following the policies and fees established by the Kern Community College District Board of Trustees.

Planetarium

The BC Planetarium has served over 100,000 people. This 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 Education and Services handles reservations for the planetarium and may be contacted by telephoning, (661) 395-4137.

Instructional Programs - Community Campuses

Bakersfield College is committed to providing access to instructional programs throughout its service area. Four community campus extension locations serve the greater Bakersfield area, Northern Kern County and the mountain area of Tehachapi.

Delano Community Campus

The Delano Community Campus provides services to meet the educational needs of students in Kern County's second largest city. Additionally, the campus serves the rural areas of Northern Kern and Southern Tulare counties. General education, transfer and vocational courses allow students to complete an Associate in Arts Degree. Courses are scheduled throughout the day and evening. Student services provided on site include: registration, assessment, counseling and financial aid assistance. Fall and spring semesters are 18 weeks in length, and the summer session is six weeks. Textbooks are available on site.

Northwest Extension

The northwest evening instructional program is located at Centennial High School, 8601 Hageman Road, and Olive

Drive Training Center, 5643 Victor Street. General education and transfer courses are offered during the fall and spring semesters. Semesters are 15 weeks in length. The summer session is six weeks. Registration and textbooks are available on site during the first week of the semester.

Southwest Extension

The southwest evening instructional program is located at Ridgeview High School, 8501 Stine Road. General education, transfer and vocational courses are offered fall, spring and summer. Semesters are 15 weeks in length. Registration and textbooks are available on site during the first week of the fall and spring semesters.

Tehachapi Extension

The Tehachapi evening instructional program is located at Tehachapi High School, 711 Anita Avenue. General education, transfer and a limited selection of vocational courses are offered in the fall and spring semesters. Semesters are 15 weeks in length. Limited student services are available on site before the fall and spring semesters. Textbooks are available the first week of each semester.

Weill Institute

The Weill Institute is located in downtown Bakersfield, 2101 K Street Mall, Bakersfield. The evening instructional program provides a variety of vocational, general education and transfer courses. A wide range of business courses offers opportunities for career enhancement. Both semester-length and short-term courses are available. Fall and spring semesters are 18 weeks in length. The Weill Institute also houses the Corporate and Community Services and Community Education and Services Program.

Cooperative Work Experience Education

Bakersfield College, in cooperation with business, industry, government and the community, makes it possible for students to earn elective credit toward a degree and/or certificate through employment experience. The student may elect the Alternate or Parallel Plan. Students selecting the Parallel Plan will be required to attend college and work in the same semester. Those selecting the Alternate Plan will be allowed to work one semester and attend college the next. The college may grant credit to a student in an amount not to exceed four units per semester for part-time occupational work experience or three units per semester for general work experience under the Parallel Plan. Under the Alternate Plan, the college may grant credit to a student in the amount of eight units per semester for full-time employment. Full-time and part-time summer work experience can also qualify for credit. Work experience may count toward graduation in all disciplines. Contact the Director of Cooperative Education for further information.

AmeriCorps, America Reads Program

AmeriCorps is a federal program that encourages and models learning through service. Service learning is a national service movement where individuals of all ages and backgrounds address our nation's education, public safety, human and environmental needs through full- or part-time service. The AmeriCorps philosophy includes "getting things done" and "making things happen."

The Bakersfield College's AmeriCorps program is a federally funded program entitled America Reads. America Reads gives students the opportunity to receive training and experience in providing tutorial services to children ages 0-3 and grades K-3. America Reads members will provide one-on-one tutoring in reading and literacy development. Members will also receive training in community service and service learning.

Participation in community service activities and providing volunteer service hours in the community are integral parts of AmeriCorps programs. Members are required to commit to a year of service. They may choose to enroll as a 1/2-time member (450 service hours), after which they will receive an educational award (1/2-time members - \$2,353, 1/4-time members - \$1,181).

While serving as an AmeriCorps member, students can earn college credits in Early Childhood Education, Child Development, Human Services and other related programs. Students may also elect to earn additional units in Work Experience.

The AmeriCorps program is located in the Cooperative Education Department, Student Services Building, Room 25. Interested students may drop by or call 395-4550 for applications and additional information.

Centers For Business, Industry and Government (CBIG) The Small Business Development Center

Operated under grants from the U.S. Small Business Administration and other governmental agencies, this center offers free counseling to small business owners and individuals interested in starting a business in Kern, Inyo, and Mono Counties. Low-cost seminars are held on a regular basis for practical guidance in owning and operating a small business.

Corporate and Community Services

Meeting Kern County's employee training needs, this center develops and implements fee-based, in-house training programs in a wide variety of areas including management training, supervisory skills or specific technical vocational needs. Accelerated A.A. degree programs are also available for corporations who wish to upgrade their employee's education.

Student Right-to-Know

In compliance with the federal Student Right-to-Know (SRTK) and Campus Security Act of 1990 (Public Law 101-542), Bakersfield College is publishing the following information about Completion and Transfer Rates. These rates are based on a very limited cohort (or group) of students. The cohort of students is tracked over a period of three years to determine their academic outcomes. This year we are publishing information about the 1996 cohort which was tracked from Fall 1996 through Spring 1999.

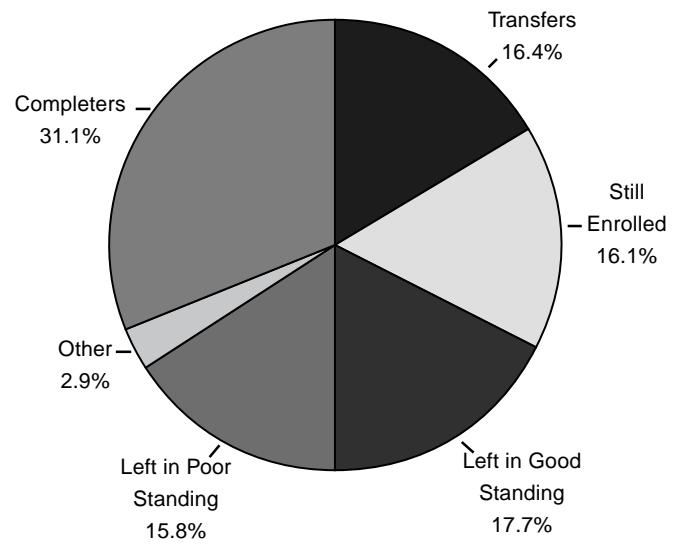
The cohort is limited because it includes only students who entered BC in Fall 1996 as first time, full-time students seeking a degree, certificate or transfer. For perspective, in Fall 1996, 12,538 students were enrolled at BC but the 1996 cohort included only 267 students or 2.1% of the total enrollment. The cohort excludes continuing students and students enrolled in less than 12 units during Fall 1996. It also excludes students who attended BC to upgrade job skills, gain new job skills, maintain licenses, improve basic skills, formulate career interests and complete credits for high school. Further, it excludes students enrolled in classes for personal enrichment, general interest and/or intellectual/cultural improvement.

Each student in the cohort can be counted in only one of the categories below. A student who fits into more than one category is counted in the one that is highest on the list. For example, a student who receives a degree and transfers is only counted in the Completer category. The categories, listed in order, are: Completer (completed an A.A., A.S., certificate or 56 transferable units with a 2.0 or better GPA within the three year period), Transfer (transferred to another public postsecondary institution in California between Spring 1997 and Spring 1999), Still Enrolled, Left in Good Academic Standing, Left in Poor Academic Standing and Other (left the college to serve in the armed forces, a Federal Foreign Aid Service (such as the Peace Corps), on an official church mission or became permanently and totally disabled or died).

The figure to the right depicts the results of all categories in BC's 1996 SRTK Cohort. This data suggests that 79% of BC's first-time, full-time students in Fall 1996 achieved some level of success – either program completion, transfer, departure in good standing or continued enrollment.

The table below compares BC's Completion and Transfer Rates to the statewide community college average. The slight difference in the percentages compared to the figure above is due to the exclusion of the 'Other' category. The rates below are considered our official rates by the California Community College Chancellor's Office.

BC Outcomes for Fall 1995 SRTK Cohort



	Completion Rate	Completion Rate	Real Transfer Rate
Statewide	34.3%	23.1%	23.1%
BC	32.1%	16.8	27.7%

Please note that these rates are not representative of the entire student population at BC, just a select group. Nor do they account for student outcomes achieved after the three-year tracking period. For further information on SRTK methodology, interpretation and rates at other community colleges, visit the California Community College Chancellor's Office web site at <http://srtk.cccco.edu/>.

ADMISSIONS AND REGISTRATION PROCEDURES

Academic Eligibility

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

Any person 18 years of age or older who is not a high school graduate may be admitted if his/her previous training or experience indicates that he/she will profit from the offerings of the college. Such students must have the approval of the Director of Enrollment Services.

In accordance with California Education Code regulations, high school students may enroll as special part-time students. Enrollment must be recommended by the high school principal, with parental consent and approval by the college Director of Enrollment Services. Units earned may be used for high school or college credit or for both. Students enrolled under this program are exempted from paying required fees if the courses are taken for high school credit only.

Bakersfield College will evaluate for transfer credit all lower division course work taken at an institution accredited by national and regional accreditation groups that have been recognized by the Council on Post-secondary Accreditation as meeting acceptable levels of quality and performance. Transfer credits may not be posted to a student's transcript until the student completes a degree or certificate program. 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

A "resident" is a student who has residence in the state of California for more than one year immediately preceding the residence determination date which is the day before the first day of classes.

A "district resident" is a resident who has residence within a community college district in the state. Any resident of the Kern Community College District may be admitted.

The resident of any California community college district may attend a community college in any other district in this state, subject to generally applicable admission criteria, and subject to any restrictions set forth in a notice of restriction issued by a district.

Determination of Student Residence

In order to determine a person's place of residence, reference is made to the following statutory rules:

1. Every person has, in law, a residence.
2. Any person who is married or is 18 years of age or older and under no legal disability to do so, may establish residence.
3. In determining the place of residence the following rules are to be observed:
 - a. There can be but one place of residence.
 - b. 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.
 - c. A residence cannot be lost until another is gained.
 - d. The residence can be changed only by the union of act and intent.
 - e. A man or a woman may establish his or her residence. A woman's residence shall not be derivative from that of her husband.
 - f. 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.
 - g. 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.

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.

Admissions Form

An admissions form may be obtained from the Office of Admissions and Records on the main campus, on the college web page (www.bakersfieldcollege.org), or from the Delano Community Campus. It must be filed prior to registration. The application should include the prospective student's social security number.

Student Identification Number

All students are assigned an identification number when a completed admissions form is submitted to the Office of Admissions and Records. The number assigned will be the student's social security number. Any student who *does not* want the social security number assigned as the student identification number may request that another number be assigned. This request must be made in person with a photo identification at the Office of Admissions and Records.

Student Matriculation Plan

What is matriculation?

Every student should have an educational goal, a reason for going to college. Matriculation is the process that allows the college and you to form a partnership which helps you attain that goal. We ask you to commit yourself to an educational objective and we will commit ourselves to assist you to succeed. To ensure the success of the partnership:

The college agrees to:

- Provide an admission process
- Provide an assessment of basic educational skills and career goals
- Provide counseling/advising for the development of an individual education plan
- Provide quality instruction
- Provide a wide variety of courses
- Offer referral to support services as necessary
- Follow up on student academic progress

The student agrees to:

- Express a broad educational intent upon application for admission
- Attend an orientation session
- Complete the assessment test(s)
- Declare a specific educational objective during the term after which you complete 15 units of course work
- Attend classes regularly, complete assigned course work and seek out counseling services as necessary
- Complete courses and maintain progress toward an educational goal as identified in your individual educational plan
- Seek out support services as needed

Which students are involved?

Matriculation is a process designed to promote student success. *All students* are expected to participate in the matriculation activities listed below:

1. **Orientation** services which include information concerning college procedures, policies and requirements
2. **Assessment** services which include the following:
 - a. Administration of assessment instruments to determine student skills in reading, writing and mathematics
 - b. Assistance to students in the identification of aptitudes, interests and educational objectives
3. **Counseling/advising** services which include the following:
 - a. Counseling/advisement concerning course selection
 - b. Counseling/advisement concerning educational planning
 - c. Referral to specialized support services as needed

Only students who have completed an Associate Degree or higher may be exempted from orientation, assessment and counseling; however, an exempt student wishing to enroll in a course that has a test score prerequisite must participate in the college's assessment of English and math skills.

A student may also decline to participate in the matriculation process, but in so doing relinquishes the right to participate in early registration and may not be able to enroll in courses which have prerequisite requirements. Information is available in the Office of Admissions and Records and the Counseling Center.

Course Admission Policy

The policy of the college is that, unless specifically exempted by statute or regulation, every course, course section, or class reported for state aid, wherever offered and maintained by the college, shall be fully open to enrollment and participation by any person who has been admitted to the college and, when applicable, a relevant program, and who meets established prerequisites.

What are the rights of students in regard to matriculation?

You may challenge or appeal any allegation of violation of matriculation regulations.

Prerequisite Challenge Procedure

You have the right to:

1. Appeal a prerequisite course requirement because the required course is not available
2. Challenge any prerequisite believed to be discriminatory
3. Challenge any matriculation regulations/procedures that have the effect of being discriminatory based on how the services are applied to you
4. Be provided alternative services for the matriculation process if necessary for ethnic and language minority students and students with disabilities

Any challenge or appeal should be addressed to the Dean of Students.

College Assessment Program

Academic skills assessment is designed to determine students' entry level skills in reading, writing, and math. The writing of an English essay is also required for recommended placement in an English composition course (ENGL B1a, ENGL B1, ENGL B60, ACDV B68).

The Assessment Center coordinates the assessment program. Assessment testing is regularly scheduled, no appointment is necessary. A schedule of assessment dates, times and locations will be provided upon filing an admission form in the Office of Admissions and Records. Assessment for students for whom English is a second language is also available. Persons with disabilities who might require testing accommodations should contact the Supportive Services Center at (661) 395-4334.

Academic skills assessment may be waived by providing proof of eligibility for admission to a California State University with the appropriate combination of ACT and SAT scores and high school grade point average.

To be granted credit for courses taken at another college, the student must provide an official transcript from each college attended and complete a request for evaluation form from the Office of Admissions and Records.

Assessment Policy For Learning/Physically Disabled Students

In compliance with federal and state laws, Bakersfield College assures each student an equal opportunity to demonstrate competency or knowledge in a subject area at each point in the educational process. Students with disabilities are expected to demonstrate the same competency or knowledge as other students.

Accommodations are made on an individual basis in the method or format of examination. 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 spell checker or calculator, the use of a tape recorder and, where appropriate to the disability, an alternative mode of assessment.

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 and Human Services: 12 units.
2. Approval by the Veterans Administration for training under Chapter 31, 32, 34, 35 or 1606, Title 38 U.S. Code.

	<i>Semester</i>	<i>Summer</i>
Full time	12 units	4 units
Three-fourths time	9-11 units	3 units
One-half time	6-8 units	2 units
3. "F-1" Visa (foreign) student status: 12 units.
4. 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 (2.0 grade point average) or higher.
5. Eligibility to participate in student government as an office holder: 6 units.

Registration

Registration at Bakersfield College is conducted by touch-tone telephone or on the World Wide Web. Registration is available, by priority appointment, to continuing students who were enrolled for classes after the 30 percent course withdrawal date. It is also available to new and returning students who have completed orientation, assessment and counseling/advising, and filed the appropriate student information forms. Students must be *officially registered* before attending classes.

There is also an open, walk-in registration period conducted approximately one week prior to the beginning of each semester for registration in classes requiring an instructor's signature.

Registration dates are indicated in the front of this catalog and in the class schedule.

Year Round Telephone or Web Registration, Adds and Drops

Telephone or web registration is available all semester except for holidays and special dates. The telephone registration system is available from 7:30 a.m. to 2:00 a.m. daily. The college web page is available from 8:00 a.m. to 2:00 a.m. daily except Sunday.

Fees

Community College Enrollment Fees

The enrollment fee is \$11 per unit, no maximum.

Student Health Fee

A \$11 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 to make health-center services available to all main campus students and 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. Temporary assistance to needy family recipients.
6. Supplemental Social Security Income/State Supplementary Program recipients.
7. General assistance program recipients.

Exemption will be provided with written proof of any of the above.

Student Center Fee

Bakersfield College students shall be assessed \$1 per unit for courses on the main campus up to a maximum of \$5 per fall semester and \$5 per spring semester. The fee shall not be assessed for summer session enrollment.

Course Audit Fee

Students auditing credit classes shall be charged a fee assessed in the manner as an enrollment fee, unless enrolled in 10 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 \$130 per unit up to a maximum of 15 units per semester.

Miscellaneous Fees and Information

1. The Student Services Card may be purchased for a \$15 fee.
2. Parking on the main campus and the Weill Institute is restricted to parking permit holders. A semester parking permit is \$20.

The College Bookstore is open year-round except during college holidays. It is estimated that the cost of books and supplies will be \$300 to \$350 per semester for a 15-unit schedule.

Students must supply their own suits for physical education classes.

Refunds**Enrollment and Tuition Refunds**

Enrollment and tuition fees will be credited to the student account, when applicable, for program changes through the first two weeks of the fall or spring semester. In courses other than semester length, the Office of Admissions and Records should be consulted regarding withdrawal and refund deadlines.

To receive the enrollment or tuition refund, a student must apply for the refund in the Business Services Office before the end of the second consecutive semester of non-attendance. (Summer session is not considered a semester.) If a student does not apply for a fee refund within this timeframe, funds will revert to the Kern Community College District.

Should the college cancel a class in which a student is enrolled and there is a reduction in units which results in a lower fee, the student should request a refund through the Business Services Office.

Student Health Fee Refund

Health fees will be credited to the student account when applicable, if all classes on the main campus are dropped and an enrollment fee credit is generated by the transaction.

To receive the health fee refund, a student must apply for the refund in the Business Services Office before the end of the second consecutive semester of non-attendance. (Summer session is not considered a semester.)

ACADEMIC REGULATIONS

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 2.0) or higher.

Grade	Grade Points
A-Excellent	4 per unit
B-Good	3 per unit
C-Satisfactory	2 per unit
D-Passing, Less Than Satisfactory	1 per unit
F-Failing	0 per unit
AU-Audit	0 per unit
CR-Credit	Not computed in GPA
NC-No Credit	Not computed in GPA
I-Incomplete	Not computed in GPA
W-Withdrawn	Not computed in GPA
IP-In Progress	Not computed in GPA
RD-Report Delayed	Not computed in GPA

AU-Audit

Students who have been admitted to the college may enroll in courses as auditors with the permission of the instructor and subject to the following provisions:

1. Priority shall be given to students who wish to take the course for credit.
2. A student in a course shall not be permitted to change from audit to credit status nor from credit to audit.
3. The cost to audit a class is the same as the cost for other classes. (Students enrolled in 10 or more other units will not be charged this fee.)

Course Audit Forms are available in the Office of Admissions and Records beginning on the first day of class.

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 Dean of Students 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. Petitions for credit-no credit must be 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.

Credit-no credit forms are available in the Office of Admissions and Records. The following courses are approved for credit-no credit grading:

ACDV B5a, B66, B68, B70a-f, B74, B75, B76, B91, B190, B195, B201a, B201b, B222a, B292; **ADMJ** B1, B2, B3, B4, B5, B9, B10, B16, B61, B62, B69; **AGRI** B10; **ANSC** B71; **APPR** B60cs, B60ec, B60fa, B60fb, B60pe, B60pt, B65xf; **ART** all courses except **ART** B17ab, B17cd, B18ab, B20, B21, B22, B23, B24 B29; **AUTO** B67abc, B68; **BSAD** B18a, B19; **BUS** B3, B50a, B50b, B56a, B56b, B57a, B57b, B252a; **CADM** B55, B56, B70c, B70d, B70e; **CHDV** B70b, B70e, B70f; **COMS** B5, B40, B52a, B57a, B57b, B62a, B62b, B62c, B73, B74a, B74b, B74c, B74d, B74e, B74f, B77, B95, B201; **ELET** B55; **ENGL** B34, B60, B255; **ENSL** B2, B3, B75ab, B75cd; **ENVT** B1a, B1b; **FDSV** B71; **GERO** B8, B30, B40, B230; **HMSV** B8, B45; **INDT** B50; **JAPN** B52a; **MATH** B2, B255; **MEDS** B65, B66, B67L; **MGMT** B50, B51a, B51b, B51c, B52, B53, B54, B55; **MKTG** B72; **MUSC** B5abcd, B20ma, B230abc; **NURS** (VNRS) all clinical components of nursing courses; **NURS** B52, B70, B253, B254, B255; **NUTR** B255; **OFFT** B255; **ORNH** B2; **PHED** B3adp, B3ads, B3adw, B5wsb, B6a, B6b, B6bad, B6bb, B6fcx, B6g, B6gi, B6hx, B6Lg, B6pf, B6r, B6s, B6sc, B6sfx, B6t, B6ti, B6v, B6vi, B6wt, B7fb, B7w, B9s, B9t, B9tr, B32, B52; **PHIL** all courses except **PHIL** B9, B10, B32, B33, B37 (Philosophy majors may not take Philosophy courses for credit/no credit grading); **PHSC** B35e; **POLS** all courses except **POLS** B1, B2, B3, B12; **PSYC** B8; **RADT** B4a; **REAL** B70a; **SMBS** B54, B55, B60, B63, B72; **SOCI** B45; **SPCH** B3; **SPST** B48, B201/B201L; **STDV** B1, B3, B6, B51, B53, B55a, B74m, B201; **WELD** B74a-B74b; **WEXP** B250ab

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 between the dates 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 course is listed as an open-entry/open-exit course, 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. The “IP” cannot be given more than twice for any particular course. If a student enrolled in an *open-entry, open-exit* course is assigned an “IP” at the end of an attendance period and does not re-enroll in that course during the subsequent attendance period, the instructor shall assign a grade (A, B, C, D, F, NC, or CR) to be recorded on the student’s permanent record for the course.

RD-Report Delayed

The “RD” is a symbol assigned by the Office of Admissions and Records when there is a delay in reporting the grade of a student due to circumstances beyond the control of the student.

Academic Freedom

The district, the colleges and unit members will adhere to the following in regard to academic freedom:

1. Education in a democracy depends upon earnest and unceasing pursuit of truth and upon free and unrestricted communication of truth.
2. Faculty members shall be free to exercise academic freedom, including freedom of investigation, freedom of discussion in the classroom, freedom to select texts and other instructional materials, freedom of assignment of instructional exercises, and freedom of evaluation of student efforts.
3. Faculty members acknowledge that in the exercise of academic freedom they have a responsibility to be accurate and comprehensive in making reports, to be fair-minded in making interpretations and judgements, to respect the freedoms of other persons, to exclude irrelevant matters from classroom discussions and instructional exercises, and to make appropriate distinctions between statements of fact made as faculty subject matter specialists and opinions made as private citizens.
4. The college recognizes the fundamental right of the faculty member to be free from any censorship or restraint

which might interfere with the faculty member’s obligation to pursue truth and maintain his/her intellectual integrity in the performance of his/her teaching functions.

Academic Honesty

The administration, faculty, and staff at Bakersfield College believe that students are entitled to the finest education that the college can make available to them. At the same time, however, a student’s achievement and proficiency in subject matter must include the realization that there are standards of academic honesty which should prevail in all one’s endeavors.

Accordingly, this realization further requires that each student exerts every effort to maintain these standards.

Cheating and Plagiarism

Source: Regulations at California State University, Long Beach, General Catalog, 1990-1991, p. 56.

Definition of Plagiarism

Plagiarism is defined as the act of using the ideas or work of another person or persons as if they were one’s own, without giving credit to the source. Such an act is not plagiarism if it is ascertained that the ideas were arrived at through independent reasoning or logic or where the thought or idea is common knowledge.

Acknowledgment of an original author or source must be made through appropriate references, i.e., quotation marks, footnotes, or commentary. Examples of plagiarism include, but are not limited to, the following: the submission of a work, whether in part or in whole, completed by another, failure to give credit for ideas, statements, facts or conclusions which rightfully belong to another; in written work, failure to use quotation marks when quoting directly from another, whether it be a paragraph, a sentence, or even part thereof; close and lengthy paraphrasing of another’s writing or programming. A student who is in doubt about the extent of acceptable paraphrasing should consult the instructor.

Students are cautioned that, in conducting their research, they should prepare their notes by (a) either quoting material exactly (using quotation marks) at the time they take notes from a source; or (b) departing completely from the language used in the source, putting the material into their own words. In this way, when the material is used in the paper or project, the student can avoid plagiarism resulting from verbatim use of notes. Both quoted and paraphrased materials must be given proper citations.

Definition of Cheating

Cheating is defined as the act of obtaining or attempting to obtain or aiding another to obtain academic credit for work by the use of any dishonest, deceptive or fraudulent means. Examples of cheating during an examination include, but are not limited to, the following: copying,

either in part or in whole, from another's test or examination; discussion of answers or ideas relating to the answers on an examination or test unless such discussion is specifically authorized by the instructor; giving or receiving copies of an examination without the permission of the instructor; using or displaying notes, cheat sheets, or other information or devices inappropriate to the prescribed test conditions, as when a test of competence includes a test of unassisted recall of information, skill, or procedure; allowing someone other than the officially enrolled student to represent the same. Also included are plagiarism as defined and altering or interfering with the grading procedures.

It is often appropriate for students to study together or to work in teams on projects. However, such students should be careful to avoid the use of unauthorized assistance, and to avoid any implication of cheating, by such means as sitting apart from one another in examinations, presenting the work in a manner which clearly indicates the effort of each individual, or such other method as is appropriate to the particular course.

Every instructor has the responsibility and authority for dealing with such instances of cheating and plagiarism as may occur in class. An instructor who determines that a student has cheated or plagiarized has a range of many available options which may be as severe as giving the student a failing grade for the assignment. Furthermore, the student may face other penalties as stated in the college's Student Conduct Policy. Finally, it must be understood that a student who knowingly aids in another student's cheating or plagiarism e.g., permitting the other student to copy a paper or examination question, is as guilty as the other of the offense.

A student charged with cheating or plagiarism is entitled to appeal that charge by means of the college's Student Conduct Policies and Procedures.

Credits Allowed

Evaluations made and credit allowed by Bakersfield College are subject to review and evaluation by any college or university to which a student may transfer.

Credit by Examination

Subject to certain conditions a student may petition for credit by examination after the completion of 12 semester units at Bakersfield College, providing the student is currently enrolled and in good standing. Credit by examination may be allowed for the Advanced Placement Program, the College Level Examination Program, for fulfillment of specific Bakersfield College/high school competency agreements, or upon successful challenge by examination of specific Bakersfield College courses. Information on the policy and request for credit examination forms may be obtained from the Office of Admissions and Records.

The student's permanent record will be annotated to indicate the credit was granted by examination. A maximum of 30 units of credit by examination may be applied to the associate degree.

Advanced Placement Program

The Advanced Placement is a program of college level courses and exams for high school students. Bakersfield College grants credit toward its associate degree for the successful completion of examinations of the Advanced Placement Program of the College Entrance Examination Board. Students who score a three, four or five may be granted up to six semester units of college credit per examination in accordance with established college standards and upon approval of the appropriate division chair. Additional information may be obtained from the Office of Admissions and Records.

A residency of 12 semester units of satisfactory work must be completed at Bakersfield College prior to granting of credit under this program. A maximum of 30 units of credit by examination may be applied to the associate degree.

College Level Examination Program (CLEP)

The College Level Examination Program is a means through which academic credit may be given for nontraditional 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 through the Bakersfield College Assessment Center.

Credit for the subject area examinations will be awarded upon approval of the appropriate division chair. Subject examinations are equated with specific courses listed in the current college catalog. Further information may be obtained from the Office of Admissions and Records.

A residency of 12 semester units of satisfactory work must be completed at Bakersfield College prior to granting of credit under this program. A maximum of 30 units of credit by examination may be credited toward the associate degree.

International Baccalaureate Diploma Program

The International Baccalaureate Organization's Diploma Program is a comprehensive and rigorous two-year curriculum for university-bound students between the ages of 16 and 19. After completing the courses at the participating high school, students take the related IB examination, and the information is printed on their high school transcripts. Bakersfield College recognizes the high scholastic quality of the International Baccalaureate Diploma Program and awards credit or placement as approved. Students who plan to enroll at Bakersfield College should submit a copy of their official IB transcript to the Office of Admissions & Records for evaluation.

Units for which credit is given pursuant to these examinations will not be counted in determining the 12 semester units in residence required for an associate degree.

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 Office of Admissions and Records. 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. A maximum of 12 semester units will be allowed.

A minimum of 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 12 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 attempted at least 12 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 50 percent.

Students transferring from other collegiate institutions 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 for which they may register.

The academic status of each student is printed on the student transcript which is updated 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 shall be removed from probation when the percentage of “W”, “I”, and “NC” units falls below 50 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 unless, during the last semester of enrollment, the student earned a grade point average of 2.0 or higher, in which case the student shall be placed on continued probation.

Any student who is placed on progress probation for three consecutive semesters of enrollment shall be disqualified for admission to classes the following semester, unless during the last semester of enrollment, the percentage of units with entries of “W”, “I”, and “NC” was less than 50 percent, in which case the student shall be placed on continued probation.

Reinstatement

A student who is disqualified may be conditionally readmitted the following semester upon petition to the 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. Readmission petition forms may be obtained in the Counseling Center.

Course Repetition

Certain Bakersfield College courses are identified in the course description sections of the catalog as repeatable, with the number of times they may be repeated indicated.

Other courses may be repeated once for credit if a grade lower than “C” or its equivalent has been earned. A student who has repeated a course under this condition may file a petition with the Office of Admissions and Records to have the previous grade and credit disregarded in the calculation of the GPA. The original and subsequent grades will remain a part of the student’s permanent record. Only courses taken at Bakersfield College can be used as repeats.

Courses may also be repeated if the previous grade is at least in part a result of extenuating circumstances such as verified cases of illness, accidents, or other circumstances beyond the control of the student and if a significant lapse of time (three years) has occurred since the course was taken. Approval to repeat under these circumstances should be obtained prior to registration in the Office of Admissions and Records. In these circumstances, the previous grade will not be disregarded in the calculation of the GPA.

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, Enrollment Services, 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.

Class Attendance

Regular class attendance is expected of all students enrolled in the college. It is especially important that students attend the first session of each class for it is at this time that instructors may distribute syllabi and course requirements, and explain what is expected in terms of attendance. Students enrolled in classes that are full *may* be dropped by the instructor if they do not attend the first class session. (See First-Day Drop Policy below.)

First-Day Drop Policy

Because many classes become filled and are closed, and instructors often maintain waiting lists of students who wish to enter these classes, students in lecture and/or lab courses *may* be dropped if they do not attend the first class meeting without notifying the instructor.

Students in open entry courses may be dropped if they do not begin attending during the first week of classes.

Withdrawing From Classes

Students are responsible for officially withdrawing from any class or classes in which they no longer wish to be enrolled. After registration has been completed, and within the withdrawal date guidelines, students may drop from a class or classes through the telephone or web registration system. Non-attendance or non-payment does not release the student from this responsibility and may result in a failing grade being awarded.

Within the withdrawal date guidelines, instructors may drop students from a course for nonattendance, disruption, or failure to meet the requirements of the course.

A student who withdraws or is dropped from a semester-length course through the 30 percent date of any term will not have the course included on the permanent record. A “W” will appear on the permanent record for courses dropped between the 30 percent date and the 70 percent date of the

term. No “W” grades may be issued after the 70 percent date. In courses other than semester length, the instructor or Admissions and Records Office should be consulted regarding withdrawal date deadlines.

A student’s representative may contact the Office of Admissions and Records 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.

A “W” is not used in calculating grade point averages, but excessive “Ws” will be used as factors in progress probation and disqualification.

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 classes to their programs through the telephone or World Wide Web registration systems. Beginning with the first day of the semester, depending on the date and status of each class, written permission may be required in order to add classes. Signed enrollment transaction forms must be submitted in person to the Office of Admissions and Records. Students must be officially enrolled before attending any class.

Attendance

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

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

Faculty members may give 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.

Continuous Enrollment

To maintain catalog rights to graduation requirements, a student must remain in continuous enrollment at Bakersfield College. This means the student must enroll in at least one semester of each calendar year. Petitions for exceptions should be directed to the Vice President of Instruction.

Catalog rights apply only to Bakersfield College graduation and program requirements. If other institutions change their requirements for entrance, graduation, satisfaction of general education patterns, or in other ways it may be necessary for the student to meet the new requirements upon transfer, even if continuous enrollment has been maintained.

Final Examinations

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

Grade Reports

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

A student may obtain a printed grade report of the previous semester's grades through the third week of the semester in the Office of Admissions and Records. It will be necessary to request official or unofficial transcripts at all other times during the year.

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 by the instructor.

President's Scholars

The President of Bakersfield College invites qualified members of each entering freshman class to participate in the President's Scholars Program using criteria set up by the President's Scholars/President's Re-entry Scholars Committee. 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 Office of the Dean of Students or your high school counselor for more information.

President's Re-Entry Scholars Program

The President's Re-entry Scholars are re-entry students who have demonstrated, by their achievement at Bakersfield College, a commitment to academic excellence. Following completion of 12 degree applicable or transferable units at Bakersfield College, eligible students are invited to participate in the program, which includes services and a monetary award. An explanation of eligibility requirements and information about the program are available through the Re-entry Center or the Office of the Dean of Students.

Library Regulations

All registered students are encouraged to use the resources and services available in the library. The GADES card serves as the library card. 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, (661) 395-4461).

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 by the Office of Instruction and are given general recognition on campus and in the community.

Graduation with Honors

Students who have completed at least 60 units in degree applicable letter graded courses, have taken at least 12 of those units at Bakersfield College, and who have earned a cumulative grade point average of 3.50 or higher are eligible for graduation with honors. The honors designation will appear on the diploma and transcript as follows:

Grade Point Average	Honor Designation
3.50 - 3.69	Cum laude
3.70 - 3.89	Magna cum laude
3.90 - 4.00	Summa cum laude

Changes 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. Address and phone number changes are made from the BC home page (bakersfieldcollege.org), by records and following the on-screen directions. Name changes are made in person at Window 1 in the Admissions and Records Office. Students must present a photo identification. Students will be held responsible for all mail missent or for not receiving information.

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STUDENT SERVICES

Counseling/Advising

The Larry Robinson Counseling Center

Bakersfield College counselors and advisors are available to assist students in a variety of ways. Services provided by the counseling/advising faculty and staff include, but are not limited to, the following:

Educational Planning

Bakersfield College counselors/advisors are available to assist students in selecting educational programs and/or individual academic courses. Counselors and advisors will also assist students in preparing to transfer to a four-year college or university and will help students improve study skills or may refer them for remedial or tutorial assistance.

Career Counseling

Counselors/advisors are available to assist students in exploring possible careers and in learning about their relationship to the world of work.

Personal/Social Counseling

Counselors are available to assist students in examining concerns which interfere with personal development and academic success.

Testing

Counselors will be able to suggest additional standardized assessment, as needed, to assist students with various kinds of decision making.

Transfer Advising

Support for Bakersfield College students to foster transfer opportunities to four-year colleges and universities is available on campus. Transfer Admission Agreements (TAAs), college visitations and application workshops are scheduled throughout the year. Students are encouraged to explore the resources—including a library of catalogs and videos—available in the Career Center.

Specific course/program articulation information may be obtained from the College Articulation Officer and the Counseling Center.

Referrals

Counselors will provide students resource information and, on occasion, referrals to outside agencies for on-going assistance with personal emotional concerns.

Consultations

Counselors/advisors will provide one-on-one and/or small group consultation to assure student success and to foster a positive learning environment among students, faculty and staff.

Counseling/advising is *voluntary* and students may select the counselor/advisor of their choice. Meetings with counselors

or advisors are confidential; however, limited disclosure may be necessary if, in the professional judgment of the counselor/advisor, such is needed to prevent any individual from physical harm.

To talk with a counselor/advisor, please stop by the Counseling Center located in the Student Services Building or telephone (661) 395-4421 or (661) 395-4083. Counselors and advisors are also located in various other offices and centers on campus. Please check with the Counseling Center staff for specific information. Office hours are Monday to Thursday, 8 a.m. to 7 p.m., and Friday 8 a.m. to 5 p.m.

Counseling/advising services are available to currently enrolled students. These services are also available to prospective students who have completed the application for admission and the college assessment.

California Articulation Number (CAN) System

The California Articulation Number (CAN) System has been developed to cross reference courses among the participating community colleges, the California State University, and the University of California. Lower division, transferable Bakersfield College courses that are comparable to those at other schools have been articulated. This allows courses to then be assigned a CAN designation which is listed in the Bakersfield College Catalog; an example is ENGL B1a [CAN ENGL 2]. The CAN designation clarifies course acceptance at transfer institutions.

Extended Opportunity Programs And Services (EOPS)

EOPS is a state-funded program that serves students from low-income, educationally disadvantaged backgrounds. Services include academic, career and personal counseling, peer advising, financial aid advising, scholarship information, transfer assistance, books and other support services. The CARE component offers additional grants and/or services to full-time students who are single parents, AFDC recipients, and have at least one child under the age of 14. Participants must qualify for financial aid. The EOPS office is located in Campus Center 3.

Supportive Services (Disabled Students Programs and Services)

Supportive Services assists the campus in providing equal access for students with disabilities to the educational activities of Bakersfield College. Supportive Services provides services to identify and address appropriate individualized accommodations and services which may include special parking, liaison with the California State Department of Rehabilitation and other community resources, test taking assistance, special equipment, mobility assistance, note taking assistance, assistive computer technology, special classes, interpreters, written materials in alternate format and learning disability assessment. These services are intended to prepare

and support students in order to enable them to participate on an equal basis with their non-disabled peers.

Health Services

The Student Health Center is located in the concourse of the Student Services Building.

Currently enrolled students are entitled to confidential services provided by a full-time registered nurse and a physician available part-time. There is student health insurance coverage for college-related injuries.

The goal of the Health Center staff is to provide quality basic healthcare to assist students in attaining and maintaining a state of optimum health, both mental and physical, to promote student wellness and enhance academic success.

Information on Health Center hours may be obtained from the Health Center staff, at (661) 395-4336.

Off-Campus Housing

As a service to students seeking off-campus accommodations, the Student Activities 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. Students interested in further information may contact the Student Activities Office, Campus Center 4.

Testing/Assessment Center

Bakersfield College Assessment Center offers the General Education Development (GED) test, college credit examination and other testing programs.

WorkAbility III

In cooperation with the State Department of Rehabilitation (DR), Bakersfield College provides job placement for students with disabilities through the WorkAbility III program. A disability may include physical, communication, learning or emotional disability. Assistance with part-time jobs, full-time jobs, internships and work experience placement is provided by WorkAbility III. WorkAbility III also offers job search skills training, including resume writing and interviewing skills. These services are provided to BC students who are also clients of DR. In addition, DR may provide financial aid covering the full cost of fees, books and other services.

If a student with a disability believes he/she may qualify for services from DR, the student can visit the DR office at 1405

Commercial Way, Suite 120, Bakersfield, or call (661) 395-2525. Students applying for DR services are urged to report to the Supportive Services Center (FACE 16) at the beginning of the semester. WorkAbility III is located in the Cooperative Education Department in the Student Services Building.

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 Office of Admissions and Records confirms enrollments for social security purposes.

Job Placement Services and Part-time Employment (see WorkAbility III)

Job Placement Services 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 major or occupational goal. 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 Office 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 Job Placement Services early during their year of graduation. The placement services are available at no charge to the student or employer.

Job Placement Services is located in Student Services Building 27.

Child Development Program

Bakersfield College operates seven child development centers that are funded by the California State Department of Education. The services provided through these centers include care for infants, toddlers, and preschool age children. An inclusion program for young children with special needs is also provided.

The centers are licensed through the Department of Social Services. All teachers are professionally trained in the field of early childhood education and are certificated through the Department of Education.

Placement in the program is made according to state priorities and date of application. The program is designed for income-

eligible families who are in training full time, working full time, or training part time and working part time.

In addition to the state funded program, Bakersfield College offers child care services for children ages three months to two years of age on a fee-paying basis.

Anyone wishing to apply for child care services must file an application with the Child Care Registrar in the Family and Consumer Education Department, Monday through Friday, 8:00 a.m. - 4:30 p.m.

Veterans

Bakersfield College is approved as an institution of higher learning for the training of veterans and veterans' dependents entitled to educational assistance. 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 Office of Admissions and Records. 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 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.

Educational Benefits for Veterans and Dependents

To be eligible for veterans benefits the veteran must have as an educational objective an associate or baccalaureate degree or a certificate of achievement. The Veterans Administration will not pay benefits for courses that do not fit in a veteran's selected program. The following students may be eligible for veteran's educational benefits:

1. Veterans who were separated from active duty with the armed forces within the past 10 years who participated in the following programs:
 - a. Montgomery GI Bill-Active Duty Educational Assistance program (Chapter 30).
 - b. Montgomery GI Bill - Selected Reserve Educational Assistance Program (Chapter 1606).
 - c. VEAP (Chapter 32) - Contributory VEAP or Section 903 - Services beginning on or after January 1, 1977 through June 30, 1985.
 - d. Vocational Rehabilitation (Chapter 31) - Veterans who served in the Armed Forces are eligible for vocational rehabilitation if they suffered a service-connected disability while on active service. 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 enrollment in college.
2. Spouses and/or children may be eligible for the Dependent's Educational Assistance Program (Chapter 35). A student must be the child or spouse of a veteran

who is deceased or who has a service-connected disability rated at 100 percent.

Dependents of veterans with disabilities (spouses and/or children) may be eligible to receive tuition-free assistance at any California post-secondary educational institution.

Additional information may be obtained from the Veteran's Coordinator located in the Office of Admissions and Records.

Student Financial Assistance

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

Applications and full information concerning the following programs can be obtained by personal contact or by phoning (661) 395-4427.

Federal Pell Grant

Federal grant program based upon need and cost of attendance and level of enrollment.

Board of Governors Waiver (BOGW)

State supported grant program to waive the enrollment fee for eligible California residents. The BOGW 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 funded program offering access and retention services including books for low-income, educationally disadvantaged students.

Scholarships

Cash awards provided by the Bakersfield College Foundation and local groups and organizations for students who can demonstrate academic merit and/or financial need.

Federal Supplemental Educational Opportunity Grant

Federal program which provides additional grant assistance for students of exceptional financial need.

Federal Stafford Student Loans

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

Short-Term Loans

A limited number of loans are available for emergency needs, and repayable within 30 days at no interest.

Part-time Employment

Campus employment is available through Federal Work-Study, a federally funded program for students who can demonstrate financial need. Employment is used to fund 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 Office of Financial Aid.

Off-campus employment-See Job 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 Student Senate whose members are elected by the students. All official action taken by the students of the college comes from the decisions of the Senate.

The Judicial Board—the Student Court—is composed of a Chief Justice and four Associate Justices with meetings held weekly. 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 service organizations, religious affiliations, athletics and special interest groups. The Interclub Council (ICC) 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 Associated Students seek to encourage a worthwhile activity program. In particular the Associated Students stage Homecoming in the fall and Spring Fling in the spring, which are two of the major events held on the campus during the year. Students interested in any of the clubs or organizations may obtain further information at Student Activities Office, Campus Center 4.

Outreach Programs and Services

The Outreach Programs and Services Office conducts and coordinates campus tours for prospective students, high school visitations, contacts with community groups for recruiting purposes, and represents the college at various events and activities.

Location: Student Services, 2nd floor

Hours: 8 a.m. to 7 p.m. Monday-Thursday
8 a.m. to 5 p.m. Friday

Phone: (661) 395-4402 or (661) 395-4532

Student Achievement Programs and Services

Student Achievement Services and Programs, which include the Martin Luther King, Jr. Center, Youth Activities Program and the ESL Tutoring Program, promote mutual respect and understanding for diversity of culture, languages, learning styles, ages and ideas both within the campus community and the world as a whole.

The program encourages the enrollment of and academic success/retention and completion of all students, but with special attention to African American, International/foreign-born students and students whose first language is not English. The program also values and supports students who begin college with special educational needs, such as re-entry/single parent and students who are participating in cohort groups in campus programs such as Americorps, College Readiness, Cal-Works, or Foster youth Mentoring, ESL Tutoring, Peer-Tutoring and Peer Mentoring Programs. The specialized and expanded time provided by the program in career planning and counseling benefit these students who may require additional counseling time to meet their educational needs.

Location: Student Services, 2nd floor, 193

Hours: 8 a.m. to 5 p.m. Monday-Friday

Phone: (661) 395-4570

Chicano Cultural Center

The Chicano Cultural Center at Bakersfield College offers a variety of support services for prospective and enrolled Chicano/Latino students. Recruitment, retention and educational goal attainment are the focus of programs offered by the center. Some of the activities include the following: Open House, Mariachi Night, Scholarship Dinner, Come Meet the Chicano/Latino Faculty, Chicano/Latino Involvement - Making a Difference, Cinco de Mayo Breakfast, Chicano/Latino Film Fest, Chicano/Latino Commencement, Bakersfield College Mariachi Program, and Cesar Chavez Memorial.

The center houses a collection of resource materials related to Chicano and Latino issues. The Chicano Cultural Center also encourages and supports the Bakersfield College community in its postsecondary educational endeavors. The center has an informal study and lounge area where all are welcome to drop by. It is located on the second floor of the Student Services Building, (661) 395-4532.

College Readiness Program

The College Readiness Program is a two-week simulation of conditions that students face when they attend Bakersfield College. Assessment, assigned and monitored homework, study skills, math, English, counseling and vocational awareness are all part of the program. Selection for the program is a step toward educational and career success. Hours: 8 a.m. to 5 p.m., Monday - Friday, (661) 395-4532.

ESL Tutoring

The ESL Tutoring Program provides tutoring sessions for both international/foreign students and students whose first language is not English. Students benefit from this service by improving their language and reading skills and therefore their successful completion of course work in language skills.

Tutoring sessions are available days and some evenings. Call to schedule an appointment.

Location: Student Services, 2nd floor, 195

Hours: 9 a.m. to 6 p.m. Monday-Friday

Phone: (661) 395-4582

Youth Activities Program

The Youth Activities Program at Bakersfield College serves eligible youth, age 17 to 21, by providing activities that increase the employment, retention, earnings and occupational skill attainment of participants.

The Program links academic and occupational learning through mentoring, paid and unpaid work experience (such as internships and job shadowing), occupational skills training, leadership development, tutoring, study skills training, instruction, and supportive services. Participants also receive guidance, counseling and follow-up services.

Location: Student Services Bldg., 2nd floor, 194

Hours: 8 a.m. to 5 p.m. Monday-Friday

Phone: (661) 395-4453

International Student Center

The International Student Center seeks to promote mutual respect and understanding for the diversity of cultures, languages and ideas on our campus and in our world. It is also a home away from home for interested students, particularly those whose first language is not English or those who are in the U.S. on visas.

Specific activities of the center include counseling and advising in regard to academic, career, personal, visa and immigration educational requirements; placement testing for ESL classes; orientation and registration assistance; tutoring; transfer, career and retention activities; fostering of campus and community involvement; providing referrals to schools and the community of student availability for tutoring and translation; and providing information for all students and staff on overseas opportunities and multi-cultural issues.

The center has an informal study and lounge area where all are welcome to drop by. It is located on the second floor of the Student Services Building, (661) 395-4419.

Jerry Ludeke Learning Center

The Learning Center, located on the second and mezzanine floors at the west end of the Student Services Building, provides the following services: self-paced mathematics courses, computer-assisted instruction, tutorial assistance, assistance for students with disabilities, and media related to course work and other educational needs. Areas are available where students can review audio-visual materials or receive tutoring.

The Academic Development Department of the Developmental Education Division based in the Learning Center also offers various language and study skills courses to assist students in reaching their educational goals. For example, ACDV B91 is recommended to students who read at Level 2 on the Bakersfield College Placement Assessment; students with a Level 3 classification in reading might work on their writing skills by enrolling in ACDV B68; and the short-term ACDV B70 series provides students reading at Level 4 or higher an opportunity to gain or improve study skills necessary to succeed in their other academic courses.

Students who have not met the BC graduation reading competency requirement should complete ACDV B50.

Supportive services and special classes are also offered for students with learning and other disabilities.

Martin Luther King, Jr. Center

The Martin Luther King, Jr. Center serves as an academic support center for urban inner city students attending Bakersfield College. Its primary function is to aid in recruitment, retention and transfer.

The following are some of the services and activities of the center: academic, career and personal counseling; financial aid information; awarding of scholarships; study groups; Peer-Mentoring Program, Peer-Tutoring Program, catalog library and other information on predominantly African-American colleges, transfer information for universities and colleges within California. A study area is provided in the center.

The center's lounge area provides a relaxing environment and the opportunity for social and cultural enrichment for African-American students attending Bakersfield College.

Location: Student Services, 2nd floor, 193

Hours: 8 a.m. to 5 p.m. Monday, Wednesday, Thursday and Friday

Re-entry/Resource Center

Re-entry/resource services are available 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, workshops, as well as relaxing atmosphere.

The center has a comfortable lounge where students can study or socialize between classes. The center is located on the second floor of the Student Services Building, (661) 395-4582.

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 Student Handbook 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.

Student Conduct

The Board of Trustees of the Kern Community College District, in support of public education and the exercise of general supervision of the campuses of the district, believes that student conduct must reflect the standards of good behavior expected by society. Since public education is furnished by the people of the district, it becomes a privilege for students to have this opportunity to further their education.

Students shall respect constituted authority. This shall include conformance to state laws, board regulations, college regulations, and applicable provisions of civil law.

Students are expected to observe high personal standards of decency, morality, honesty, and social relationships. Student conduct should reflect consideration for the rights of others, and students are expected to cooperate with all members of the college community.

Failure to respect the standards as set forth by Bakersfield College may be cause for disciplinary action.

Copies of the Bakersfield College Code of Student Conduct and Procedures may be found in the Bakersfield College Handbook and in the Office of the Dean of Students.

GRADUATION

The associate in arts or the associate in science degree shall be conferred by the Board of Trustees of the Kern Community District upon a Bakersfield College student who has satisfactorily completed the 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.

Students must complete candidacy for graduation requests at the beginning of the semester in which they plan to graduate. They will be notified whether or not they meet the graduation requirements. Filing periods for graduation candidacy requests are: August 1 through November 1 for December graduation, January 1 through April 1 for May graduation and June 1 through July 1 for August graduation.

Commencement ceremonies are held once each year in May. Students who complete their degree requirements during the fall, summer or spring prior to the ceremony or who will complete them in the following summer are eligible to participate.

General Requirements

1. Educational Planning: Completion of a designated course and a student education plan within the first 15 units at Bakersfield College. Choose from the following:

Agriculture: AGRI B10.

Applied Science and Technology: INDT B10.

Business: BSAD B20

FACE: CHDV B54; FDSV B50.

Foreign Language: ENSL B11

Physical Science: ARCH B1; ENGR B48.

Student Development: STDV B1, B2, B3, B4, B6, B201

2. Minimum of 60 degree applicable units, with at least a 2.0 grade point average.
3. Minimum 12 units in residence completed at Bakersfield College.
4. Completion of the required courses of a designated major.
5. Competency Requirements:
 - a. Composition: completion of English B1 with a minimum grade of "C" and satisfactory completion of Competency Examination; or placement into English B1a by Essay Placement Test and completion of English B1a with a minimum grade of "D."
 - b. Mathematics: one year of high school algebra or MATH BA 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 ACDV B50, or a satisfactory score on the Bakersfield College Reading Proficiency Test.

6. Completion of General Education Requirements. This requirement may be completed by following the BC General Education Specific Requirements, or California State University General Education Breadth, or the Intersegmental General Education Transfer Curriculum. (See General Education Requirements).
7. Completion of one course meeting the Multicultural Requirement.

Liberal Arts Major-Associate Degree

The Liberal Arts major at Bakersfield College is designed to provide students with the opportunity to earn an associate in arts degree in a broad area of study. The major is interdisciplinary and allows students to develop a variety of skills transferable to numerous occupations and fields of study. The major is intended to provide general knowledge and to develop the intellectual capacities, such as reasoning and judgment, as opposed to professional or vocational skills. This major is suitable for transfer students preparing for upper division study in a variety of fields in the liberal arts and for those students undecided as to major or further study. Students may satisfy requirements for the Liberal Arts major at Bakersfield College by completing one of the three options listed below. With any option selected, students must also complete all graduation requirements for Bakersfield College including a total of 60 degree applicable units with an overall grade point average of 2.00. Options for completing a Liberal Arts Major:

1. Completion of 18 units in the Liberal Arts and Sciences beyond those used to satisfy Bakersfield College general education requirements. These courses must be designated as Liberal Arts and Sciences under the Bakersfield College Course Classification System (CCS); see course descriptions for specific designations. No course work may be double counted as meeting both BC General Education and major requirements.
2. Completion of the California State University General Education transfer requirements.
3. Completion of the Intersegmental General Education Transfer Curriculum (IGETC).

Liberal Studies Major

The Liberal Studies major is designed for students interested in teaching as a profession. Requirements for this major may be satisfied by various educational tracks. For specific information, students are advised to consult with a counselor.

Double Majors

A single associate degree which designates gradation in two majors may be granted if all requirements for both majors are satisfied and an appropriate application for graduation is completed by the filing date. The application for graduation must specifically request a double major designation, identify the majors, and, if needed, specify the type of degree to be granted.

The degree granted—associate in arts or associate in science—will depend on the major programs completed. If one program leads to an AA and the other an AS, the degree AA or AS will be selected by the student.

Additional Associate Degrees

An associate in arts or associate in science degree will be awarded to those already possessing an associate or higher degree if:

1. All requirements in a different major from that of previous associate or higher degree are satisfied; and
2. All general education requirements in effect when beginning the new degree program are satisfied; and
3. At least 12 units, subsequent to the granting of any previous degree, are taken at Bakersfield College; and
4. The student is enrolled at Bakersfield College during the semester in which the degree requirements are completed.

Generally, only one associate in arts degree, except as required for licensing and/or retraining, may be earned at Bakersfield College. Exceptions to this policy must be approved by the Vice President of Instruction. Additional associate in science degrees may be earned.

GENERAL EDUCATION

The General Education Program at Bakersfield College includes those courses required of all students, regardless of major or career goals, for the associate degree or for transfer to a four-year institution in California. However, the program is intended to be more than a requirement, it can be an exciting, dynamic and essential part of a student's education.

The General Education Program has been designed to address the needs of men and women of all ages, abilities, ethnic identities, life styles and goals. Through general education, the college seeks to foster knowledge, skills, and attitudes that will empower students to shape the direction of their lives and their environment. Its goal is to encourage students to strive for the highest quality of life, both at leisure and at work, for themselves, their families and the larger community.

Recognizing the certainty of change, the college, through the General Education Program, hopes to prepare students to meet the challenges of the twenty-first century. Specifically, the program will assist them to develop and acquire the following:

Global Consciousness: an awareness of the complexity and diversity of the world, with its interplay of environmental, social, cultural, political, and economic forces, and an understanding of the unique role that each person plays in the system of relationships which extends from family to the international community.

Communication Skills: the ability to convey ideas, values, feelings, and knowledge accurately and effectively through written, oral, aesthetic, and technological media across personal, cultural, and national boundaries.

Adaptability: the willingness and confidence to accept and respond creatively to change, and the ability to analyze, think critically, solve problems, and resolve personal and interpersonal conflicts.

Responsibility: A respect for ethics, citizenship, and leadership, and a commitment to personal health and emotional growth which enable one to participate in life rather than react to it.

Knowledge: the body of information, reflecting both quantitative and qualitative reasoning, in the arts, sciences, and technology, their modes of inquiry and expression, their interrelationships, and the methods of accessing information in all areas of study.

The general education program thus seeks to assist students to succeed in the present and to inspire them to approach the future with a commitment to life-long learning.

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.

The awarding of an associate degree is intended to represent more than an accumulation of units. It is to symbolize a successful attempt on the part of the college to lead students through patterns of learning experiences designed to develop certain capabilities and insights. Among these are the ability to think and to communicate clearly and effectively both orally and in writing; to solve problems and to use mathematics; to understand the modes of inquiry of the major disciplines; to be aware of other cultures and times; to achieve insights gained through experience in thinking about ethical problems; and to develop the capacity for self-understanding. In addition to these accomplishments, the student shall possess sufficient depth in some field of knowledge to contribute to lifetime interest. (Title 5)

Bakersfield College General Education Specific Requirements

1. English: A minimum of three units designed to enhance student skills in expository and argumentative writing. Courses in language that use the principles and applications of language to promote logical and critical evaluation of written communication may be taken to satisfy this requirement. A college-level composition course or an introductory level composition course may be used to meet this requirement.

ENGL B1, B1a; ENSL B1.

2. Speech: A minimum of three units designed to enhance student skills in oral communication, interpersonal communication and logical reasoning in speech communication. Courses in this area emphasize critical analysis in both argumentation and debate.

BUS B3 (SPCH B3); SPCH B1, B2, B3 (BUS B3).

3. Social Sciences: A minimum of six units for AA degree; three units for AS degree. **At least one course must be from category (a).** Coursework designed to help the student explore the study of human phenomena through the disciplines of history, political science, economics, and other related disciplines. Courses in this area focus on the past relations of human activity and its development in the institutions of national and world societies.

- (a) American History and Politics:

HIST B2*, B3*, B4a*, B4b*, B17a*, B17b*, B18a*, B18b*, B20a*, B20b, B25*, B30a*-(CHST B30a*) B30b*-(CHST B30b*), B33*, B36*, B38; POLS B1*, B12*.

- (b) Other Social Science Courses: Any listed above, or **JRNL B1***, or **ECON B1**, or **ECON B2** or **GEOG B2***, **POLS B2***, or **POLS B3***, or **POLS B16**, or **BSAD B20**, or **BUS B40**.

4. Behavioral Sciences: A minimum of three units designed to introduce the student to the study of human behavior. Courses in the disciplines of anthropology, psychology, sociology, child development and other related courses can be taken to meet this requirement.

ANTH B2*, B5; BUS B5; PSYC B1a, B38 ; CHDV B13a; GERO B8 (HMSV B8, PSYC B8); HMSV B8 (GERO B8, PSYC B8); PSYC B8 (GERO B8, HMSV B8); SOCI B1*, B30, B36 (CHST B36)

5. Natural Sciences: : A minimum of three units that introduce the student to the world of scientific inquiry. Courses in the disciplines in either the physical or life sciences include anthropology, biology, chemistry, environmental science, physical science and other related courses. Such courses explore the relationship of man and science.

Life Sciences: **ANSC B1; ANTH B1; BIOL B3a, B7, B10, B11, B14, B16, B18, B20; CHEM B49 (ENVT B49); CRPS B1; ENVT B49 (CHEM B49); NUTR B10; FORE B2; SOIL B1.**

Physical Sciences: **ASTR B1; CHEM B1a, B2a, B15, B16; GEOG B1, B1L, B2*; GEOL B1a, B10, B10L; PHSC B11; PHYS B2a, B4a.**

6. Humanities: A minimum of three units exploring the visual and performing arts, philosophy, literature, and the foreign languages. Courses in this area examine the cultural and artistic expression of man in the aesthetic environment.

ARCH B1; ART B1, B2ab, B2ef, B3ab, B3ef, B5ab, B7ab, B9ab, B11ab, B17ab, B20, B30a, B30b, B30c, B30d; ASL B1, B2, B3; ENGL B1b, B2, B5a, B5b, B10, B11, B12, B20ab, B21, B23, B27, B28, B29, B30a, B30b, B35, B41a, B41b, B41c, B41d; ENSL B2, B22, B31; FREN B1, B2, B3, B4; GERM B1ab, B2; JAPN B1, B2; SPAN B1ab, B2ab, B3, B4, B10, MUSC B2, B4ab, B5ab, B6ab, B9ab, B10a, B10b, B10c, B10d, B12a, B12b, B12c, B12d, B13a, B13b, B13c, B13d, B14a, B14b, B14c, B14d, B15a, B15b, B17a, B17b, B17c, B17d, B21ab, B22, B23, B24*, B27; PHIL B6a, B6b, B10, B12, B14, B32, B33, B37*; SPCH B21*; THEA B1, B2ab, B4, B5, B6, B7, B8, B12a, B20, B27, B28, B30, B31, B32, B35, B227, B228.

7. Mathematics, Logic, Computer Science: A minimum of three units designed to develop skills in solving problems, mathematical and logical thinking. Courses in the areas of mathematics, behavioral science, philosophy, and computer science may be taken to meet this requirement.

BEHS B5 (PSYC B5); COMS B11, B12, B13; ENGR B19f/B19p; MATH BA, BB, BC, BD, B1, B2, B6a, B16, B22, B23, B200a, B200d; PHIL B7, B9; PSYC B5 (BEHS B5).

8. Health Education: A minimum of two units designed to introduce the student to health related issues in society today.

CHDV B49; HLED B1; MEDS B35, or completion of an approved Allied Health Program (RN, Rad T, or LVN).

9. Physical Education: A minimum of two units designed to promote health and an understanding of leisure time through physical activity. Courses in individual and group activities can be taken to meet this requirement.

All activity courses numbered 3 through 33. (Students who have observed their 21st birthday or who have a medical excuse are exempt.)

* Course satisfies the Multicultural Requirement.

Note: Students must complete at least one class identified with an (*) to satisfy the Multicultural Requirement for graduation.

The following courses satisfy both a Bakersfield College General Education category and the Multicultural Requirement: **ANTH B2; CHST B30a (HIST B30a), B30b (HIST B30b); GEOG B2; HIST B2, B3, B4a, B4b, B17a, B17b, B18a, B18b, B20a, B25, B30a (CHST B30a), B30b (CHST B30b), B33, B36; JRNL B1; MUSC B24; PHIL B37, POLS B1, B2, B3, B12; SOCI B1; SPCH B21.**

Other courses satisfying the Multicultural Requirement include **ADMJ B75 (MGMT B75); ASL B6; BUS B54; CHDV B32; MGMT B75 (ADMJ B75); PSYC B37; SOCI B28.**

Multicultural Requirement

Bakersfield College requires students to take courses that are inclusive of multicultural perspectives found in American and global society. This requirement may be satisfied through studying either American ethnic groups or world cultures.

American Ethnic Groups and Subgroups: This requirement includes courses that lead to an understanding of ethnic groups and cultures in American society. Courses will focus on themes that address the theoretical or analytical issues relevant to understanding race, culture and ethnicity. This exploration can be accomplished through the study of, but not limited to, the following subgroups in American society: African Americans, Native Americans, Asian Americans, Chicano/Latino Americans, and European-Americans. These subgroups will be studied from integrative and comparative viewpoints as they relate to the larger context of American history, society and culture. Courses meeting this requirement should include the study of a minimum of three ethnic groups, at least two groups from non-European origin.

World Cultures: Students may develop a multicultural perspective through a study of world cultures and their relationship to America in a global society. The study of the history, society or culture of a foreign country and its relationship to America can demonstrate the interdependence of all nations in a global political, economic and social infrastructure. Courses meeting this requirement should include the study of a minimum of three different world cultures, at least one of which is not solely based in western civilization.

General Education Options for Transfer

Bakersfield College students transferring to a CSU or UC campus have three options for completing their general education requirements. Each option offers advantages and disadvantages. These should be examined carefully. Bakersfield College counselors and advisors can help you select the right option.

Two of the primary choices for general education are the California State University (CSU) A-E pattern and the

Intersegmental General Education Transfer Curriculum (IGETC). Both the CSU and IGETC patterns should be seriously considered. The third option is the specific general education pattern for each UC or CSU campus taken by students who begin their studies at that university. Few transfer students follow this option because the student must match the courses and pattern required at a specific university and BC cannot certify completion of this option.

California State University (CSU) Pattern

Advantages: Broader selection of courses compared to IGETC; students may receive certification for partial completion of the General Education Pattern (24-unit minimum).

Disadvantages: Will not satisfy general education requirements for UC.

Recommended for: Students who have definite plans to transfer to a CSU campus.

Requirements: A total of 48 semester units are needed to fully complete the CSU requirements. Of the 48 semester units, 39 can be completed and certified by Bakersfield College (minimum of 24 units). Students are strongly advised to complete all areas of the 39-unit pattern at Bakersfield College. The remaining nine units must be completed in upper division work at the CSU campus. **Bakersfield College will not use coursework from out of state or private institutions for GEC certification.**

Intersegmental General Education Transfer Curriculum, (IGETC)

Advantages: Flexibility. IGETC will satisfy general education requirements for both CSU and most UC campuses (UC Professional Schools and Revelle and 5th College at UCSD do not guarantee acceptance of IGETC).

Disadvantages: More limited choice of courses; a “D” grade is not acceptable for IGETC.

Recommended for: Students transferring to a UC campus (note exceptions above). Students who are considering both CSU and UC campuses.

Requirements: In most cases, the entire pattern must be completed before transferring to receive certification of completion. For students approaching readiness for transfer and for good cause are unable to complete one or two IGETC courses, partial certification *may* be approved, provided those courses are not required for admission. In such cases, a petition must be completed by the student; see a counselor. Contact Admissions and Records Office for verification of IGETC prior to transferring. **Bakersfield College will not use coursework from out of state or private institutions for IGETC certification.**

NOTE: Some UC majors are very intensive in lower division requirements, therefore general education requirements and patterns are modified or moved to upper division. If in doubt, check with a counselor or advisor.

“Double counting” of courses for general education-breadth and major requirements and prerequisites is done at the option of the CSU campus. However, double counting is not permitted within CSU general education categories.

General Education Requirements of Four-year Colleges

On the following pages are the general education requirements for the California State University System. The general education requirements of the several branches of the University of California are so varied that it is wise to study the catalog 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

General Education: To be eligible for graduation with a bachelor’s degree from the California State University, a student must complete a minimum of 48 semester units of general education.

A total of 39 semester units completed at Bakersfield College will be accepted toward CSU general education requirements. Students are also responsible for completing an additional nine semester units of upper division general education at the CSU. Although a minimum of 56 units is required for transfer, 60 units are required for transfer as a junior.

General Education Certification (GEC): Certification of general education facilitates the transfer and evaluation process. Students admitted to a CSU campus with full certification may not be held to any additional lower-division general education requirements. Certification is subject to the following conditions:

1. For full certification, no fewer than 39 units will be certified; for partial certification, no fewer than 24 units will be certified;
2. Only courses completed at BC and approved colleges will be certified (**Bakersfield College will not use coursework from out of state or private institutions for GEC certification**); and
3. Only entire areas will be certified.

Students are strongly advised to complete all areas of the pattern at BC. If course work from another college is to be used to meet general education requirements, it is important to plan an appropriate general education program. Students are advised to meet with a Counselor before enrolling in the last planned semester prior to transfer. At this time students may request an official evaluation of GEC certification.

General education certification is automatically completed for Bakersfield College transcripts sent to any of the CSU campuses.

California State University General Education Breadth Course List.

A. Communication in the English Language and Critical Thinking:

A minimum of nine semester units in both oral and written communication in the English language, and in critical thinking and reasoning. Students must complete all of Area A with grades of “C” or higher prior to transferring.

- A.1. Oral Communication: **SPCH** B1.
- A.2. Written Communication: **ENGL** B1a.
- A.3. Critical Thinking: **PHIL** B7, B9; **ENGL** B1b, B2 or **SPCH** B5.

B. Physical Universe and Life Forms:

A minimum of nine semester units including instruction in physical and life science (at least one course must include a laboratory) and instruction in math/quantitative reasoning. Choose one course from each area. Courses with a laboratory are identified by an asterisk (*), see B.3. Students must complete Area B.4 with a grade of “C” or higher prior to transferring.

- B.1. Physical Universe: **ASTR** B1; **CHEM** B1a*, B2a*, B15*, B16*, B49*; **ENVT** B49*; **GEOG** B1, B1L*, **GEOL** B1a*, B10, B10L*; **PHYS** B2a*, B4a*; **PHSC** B11*.
- B.2. Life Science: **ANTH** B1; **BIOL** B3a*, B3b*, B10*, B11*, B14*, B15*, B16*, B18*, B20*.
- B.3. Laboratory activity identified by (*).
- B.4. Mathematics/Quantitative Reasoning: **BEHS** B5; **COMS** B11, B12, B13; **ENGR** B19f/B19p; **MATH** BC, B1, B2, B6a, B16, B22, B23, **PSYC** B5.

C. Arts, Literature, Philosophy and Foreign Language:

A minimum of nine semester units among the arts, literature, philosophy and foreign languages. Every attempt should be made to include western and non-western cultures. Courses covering non-western cultures are identified by a star (★). At least one course must be taken from arts and one from humanities.

- C.1. Arts: (Art, Dance, Music, Theatre): **ART** B1, B2ab, B3ab, B11ab, B30a, B30b, B30c, B30d, **DANC** B6bLb, B6jd, B6md; **MUSC** B2, B4a, B4b, B21a, B21b, B22, B23, B24, B27; **THEA** B1, B2a, B2b, B4, B5, B6, B7, B12a, B20, B27, B31, B32, B35, B227.
- C.2. Humanities: (Literature, Philosophy, Foreign Languages): **ASL** B1, B2, B3; **ENGL** B1b, B5a, B5b, B10, B11, B12, B20a★, B20b★, B21, B23, B27, B28, B29, B30a, B30b, B35; **FREN** B1, B2, B3, B4; **GERM** B1ab, B2; **JAPN** B1★, B2★; **PHIL** B6a, B6b, B7, B9, B10, B12, B14, B32★, B33, B37★; **SPAN** B1ab, B2ab, B3, B4, B10.

D. Social, Political, and Economic Institution and Behavior: Historical Background:

A minimum of nine semester units dealing with human social, political, and economic institutions and behavior and their historical

background. Fulfillment of this requirement must include courses taken in at least two disciplines. Every effort should be made to include western or non-western cultures. See notes below for information concerning additional requirements. Courses covering non-western cultures are identified by a star (★).

- D.1. Anthropology and Archaeology: **ANTH** B2★, B5.
- D.2. Economics: **ECON** B1, B2.
- D.3. Ethnic Studies: **ANTH** B5; **CHST** B30a, B30b, B36; **HIST** B18a, B18b, B20a, B20b, B30a, B30b, B36; **SOCI** B28★, B30, B36.
- D.4. Gender Studies: **ENGL** B23; **HIST** B25; **PSYC** B38; **SOCI** B28★.
- D.5. Geography: **GEOG** B2.
- D.6. History: **CHST** B30a, B30b. **HIST** B2, B3, B4a, B4b, B17a, B17b, B18a, B18b, B20a, B20b, B25, B30a, B30b, B33, B36, B38.
- D.7. Interdisciplinary Social or Behavioral Science: **CHDV** B13a.
- D.8. Political Science, Government, and Legal Institutions: **POLS** B1, B2, B3, B12, B16.
- D.9. Psychology: **PSYC** B1a.
- D.10. Sociology and Criminology: **CHST** B36; **SOCI** B1, B28★, B30, B36.

E. Lifelong Understanding and Self-Development:

A minimum of three semester units in study designed to equip human beings for lifelong understanding and development of themselves as integrated physiological and psychological entities. A maximum of one unit of credit is allowed for physical education activity courses in this area.

BIOL B7; **FORE** B2; **GERO** B8, **HLED** B1; **HMSV** B8; **MEDS** B35; **NUTR** B10; **PHIL** B12; **PSYC** B1a, B8, B30, B31; **SOCI** B28; **STDV** B3.

Physical Education Activity Courses:

PHED B3adp, B3ads, B3adw, B5, B6, B7, B9, B10, B11, B12, B13, B14, B16, B17, B20, B22, B23, B25, B26, B27, B28, B29, B32, B33.

Notes

Additional requirements: United States history, Constitution and American ideals. The California Education Code requires that each student qualifying for graduation from a four-year institution with a bachelor's degree shall demonstrate competence in the areas of: a) United States history, and b) national, state and local government including rights and obligations of citizens. Students who wish to meet these requirements at Bakersfield College prior to transferring to a campus of the CSU may take up to six semester units (one course from Group 1 and one course from Group 2) to meet this requirement and may be credited toward satisfying General Education-Breadth Requirements in Area D above at the option of the CSU campus.

Group 1 courses which meet the American history requirement are: **CHST** B30a, **HIST** B17a, B18a, B20a, B30a, B36; **POLS** B1.

Intersegmental General Education Transfer Curriculum

The Intersegmental Committee of the Academic Senates approved the Intersegmental General Education Transfer Curriculum (IGETC) which was implemented fall 1991. The IGETC is a series of courses that community college students can use to satisfy lower division general education requirements at any CSU or UC campus. The IGETC will provide an option to the California State University General Education Requirements and will replace the University of California Transfer Core Curriculum.

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

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

IGETC certification is made by the Admissions and Records Office at the time transcripts are requested. In most cases, the entire pattern must be completed before transferring to receive certification of completion. For students approaching readiness for transfer and for good cause are unable to complete one or two IGETC courses, partial certification *may* be approved provided those courses are not required for admission. In such cases, a petition must be completed by the student; see a Counselor. Students must notify the Admissions and Records Office of coursework from another institution. **Coursework from out of state and private institutions will not be used for IGETC certification.** Students are advised to meet with a Counselor before enrolling in the last planned semester prior to transferring. At this time, students may request an official evaluation of IGETC certification.

***Courses may be listed in more than one area, but shall not be certified in more than one area.**

**Indicates that transfer credit may be limited by UC or CSU or both. Please consult with a counselor.

Area 1. **English Communication:** A minimum of nine units required; choose one from each area. **Note:** Students transferring to the UC do not have to meet the oral communication requirement or the unit requirement of Area 1.

Group A: English Composition: one course, three semester/four to five quarter units.
ENGL B1a.

Group B: Critical Thinking-English Composition: one course, three semester/four to five quarter units. Courses must have English Composition as a prerequisite.
ENGL B2; PHIL B9.

Group C: Oral Communication: one course, three semester/four to five quarter units.
SPCH B1.

Area 2. **Mathematical Concepts and Quantitative Reasoning:**

one course, three semester/4-5 quarter units.
MATH B1, B2, B6a**, B6b, B6c, B6d, B6E B22**, B23.**

Area 3. **Arts and Humanities:** At least three courses, nine semester/12-15 quarter units. At least one course from the arts and one from the humanities.

ARTS: ART B1, B2ab, B3ab, B30a, B30b, B30c, B30d; **MUSC B2**, B4a, B4b, B21a*, B21b, B22, B23, B27; THEA B12a**, B20, B31, B32**.**

HUMANITIES: **ASL B2, B3; CHST B30a*, B30b*;** **ENGL B1b, B5a, B5b, B20a, B20b, B21, B23, B27, B28, B29, B30a, B30b;** **FREN B2*, B3*, B4*;** **GERM B2;** **HIST B2, B3*, B4a*, B4b*, B17a* **, B17b* **, B18a*, B18b*, B20a*, B20b*, B25*, B30a*, B30b*, B33, B36*, B38*;** **JAPN B2;** **MUSC B24, PHIL B6a, B6b, B10, B32, B33, B37; SPAN B2ab*, B3*, B4*.**

Area 4. **Social and Behavioral Sciences:** At least three courses, nine semester/12-15 quarter units. Courses from at least two disciplines or an interdisciplinary sequence.

ANTH B2, B5; CHDV B13a; CHST B30a, B30b, B36; **GEOG B2; ECON B1, B2; HIST B2, B3*, B4a*, B4b*, B17a* **, B17b* **, B18a*, B18b*, B20a*, B20b*, B25*, B30a*, B30b*, B36*, B38*;** **POLS B1, B2, B3, B16; PSYC B1a**, B20, B40; SOCI B1, B2, B20, B28, B30, B36.**

Area 5. **Physical and Biological Sciences:** At least two courses required, seven to nine semester/nine to twelve quarter units. One physical science course and one biological science course; at least one must include a laboratory, indicated by (L).

PHYSICAL SCIENCES: **ASTR B1; CHEM B1a(L), B2a(L)**; B15(L)**;** **GEOG B1, B1(L); GEOL B1a(L), B10**, B10(L)**;** **PHYS B2a(L)**; B4a(L)**;** **PHSC B11(L)**.**

BIOLOGICAL SCIENCES: **ANTH B1; BIOL B3a(L), B3b(L), B10(L), B11(L), B14(L), B15(L), B16(L), B20(L).**

Other:

Language Other Than English. Proficiency equivalent to two years of high school study in the same language. Students transferring to the CSU do not have to meet the requirement of a language other than English for admission as a transfer student.

ASL B1; FREN B1, B2*, B3*, B4*; **GERM B1ab, B2; JAPN B2; SPAN B1ab, B2ab*, B3*, B4*.**

**CSU Graduation requirement in U.S. History,
Constitution, and American ideals**

(Not part of IGETC; may be completed prior to transfer.)

CSU requires two courses to meet this requirement, one from Group 1 and one from Group 2.

Group 1: **CHST** B30a; **HIST** B17a, B18a, B20a,
B30a, B36; **POLS** B1

Group 2: **CHST** B30b; **HIST** B17b, B18b, B20b,
B30b; **POLS** B1

Note: Courses used to satisfy this requirement may not be used to satisfy requirements for IGETC. Please consult with a counselor for additional information.

BAKERSFIELD COLLEGE CERTIFICATE OF ACHIEVEMENT AND DEGREE PROGRAMS

Listed below are certificate of achievement and degree programs which Bakersfield College currently offers. A ✓ indicates that the suggested course of study may be found in the catalog. A ★ indicates that the student must consult the appropriate division chair for further information.

	A.A. Certificate	A.A. Degree	A.S. Degree
Agriculture			
Agriculture Business Management	✓	✓	✓
Animal Science	✓	✓	✓
Crop Science	✓	✓	✓
Environmental Horticulture	✓	✓	✓
Forestry	✓	✓	✓
Horticulture	✓		
Allied Health			
Radiologic Technology			✓
Registered Nursing			✓
Vocational Nursing	✓		
Applied Science and Technology			
Auto Brakes and Wheel Alignment	✓		
Auto Engine Overhaul	✓		
Auto Tune-up	✓		
Automated Production and Manufacturing Processes Technology	✓		
Automotive Power Trains	✓		
Cabinetmaking	✓		
Construction Technology	✓		
Electronics Technology	✓		
Engineering Technology			✓
Environmental Technology	✓		✓
Industrial Drawing			★✓
Industrial Tech. (General)			✓
Industrial Tech. Automated Production and Manufacturing Processes Tech.			✓
Industrial Tech. Automotive Option			✓
Industrial Tech. Construction Option			✓
Industrial Tech. Electronics Option			✓
Industrial Tech. Industrial Drawing Option			✓
Industrial Tech. Welding Option			✓
Industrial Tech. Woodworking and Cabinetmaking Option			✓
Welding	✓		
Apprenticeship			
Bricklayers/Tilesetters	★✓		★✓
Carpentry	★✓		★✓
Electrician	★✓		★✓
Operating Engineers	★✓		★✓
Plumbers and Steamfitters	★✓		★✓
Sheet Metal	★✓		★✓

	A.A. Certificate	A.A. Degree	A.S. Degree
Art			
Art			✓
Computer Graphic Arts	✓	✓	
Photography	✓		
Behavioral Science			
Anthropology			✓
Human Services			✓
Psychology			✓
Sociology			✓
Biological Science			
Biology			✓
Business			
Accounting			✓
Administrative Office Assistant			✓
Bookkeeping	✓		
Business Administration			✓
General Business			✓
Marketing	✓	✓	
Office Assistant II			✓
Real Estate			✓
Retail Management			✓
Communications			
Journalism			✓
Speech			✓
Computer Studies			
Computer Information Systems	✓	✓	✓
Computer Science	✓	✓	
English			✓
Family and Consumer Education			
Child Development Teacher			✓
Child Development and Family Relations			✓
Child Nutrition Management Program	✓		✓
Culinary Arts			✓
Dietetic Services			✓
Food Service Management			✓
Foreign Language			
American Sign Language			✓
French			✓
Spanish			✓
Health and Physical Education			
Physical Education			✓
Liberal Arts			✓
Mathematics			✓
Music			✓

	A.A. Certificate	Degree	A.S. Degree
Philosophy	✓		
Physical Science			
Architecture/Architectural Drafting			✓
Architecture Drafting	✓		
Chemistry			✓
Engineering			✓
Geology			✓
Physics			✓
Public Administration			
Administration of Justice		✓	
Correctional Administration		✓	
Fire Technology	✓	✓	✓
Social Science			
Economics			✓
History			✓
Political Science			✓
Political Science, emphasis in International Relations			✓
Political Science, emphasis in Domestic Policy			✓
Theatre Arts			
Technical Theatre		✓	
Theatre Arts			✓

INSTRUCTIONAL AREAS

Allied Health Division

Chris Romanowich, Division Chair

Allied Health Department

Applied Science and Technology Division

Larry Fanucchi, Division Chair

Industrial Technology, including the following programs:

- Industrial Drawing
- Mechanized Agriculture
- Water Technology

Apprenticeship Program

Bill Demkey, Coordinator

Behavioral Science Division

Richard Wright, Division Chair

Behavioral Science

Business and Public Administration Division

Bill Demkey, Division Chair

Business Education
Public Administration

Cooperative Work Experience

Charles West

Developmental Education Division

Odella Johnson, Division Chair

Academic Development
Learning Center

Family and Consumer Education Division

Child Development
Foods and Nutrition

Fine and Performing Arts Division

John Gerhold, Division Chair

Art
Communication
Music
Theatre Arts

Health and Physical Education Division

Jeffrey Chudy, Division Chair

Health Education
Physical Education

Math and Computer Studies Division

Rachel Vickrey, Division Chair

Computer Studies
Math

Modern Languages Division

Kate Pluta, Division Chair

American Sign Language
English
English as a Second Language
Foreign Language

Science, Engineering and Agriculture Division

Bob Dietz, Division Chair

Agriculture
Biology
Physical Science

Social Science and Philosophy Division

Steve Smith, Division Chair

Philosophy
Social Science

Student Services Division

Kathy Rosellini, Division Chair

Student Development
Supportive Services

PROGRAMS OF STUDY AND COURSE DESCRIPTIONS

The following section is a compilation of programs of study and course descriptions offered at Bakersfield College.

Career Programs

Bakersfield College offers a variety of career programs leading to immediate employment. Some courses within these programs may be accepted for transfer at four-year colleges and universities. 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.

Transfer 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 transfer to a four-year college or university. The required and recommended courses are listed in terms of the major fields of study. 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 requirements 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.

Minimum transfer eligibility requirements to the CSU and UC systems have changed effective fall, 1998. Consult a counselor or advisor for further information.

Certificate of Completion

The certificate of completion documents the satisfactory completion of training 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 or endeavor.

English, Reading, and Mathematics Classifications

Baccalaureate-level classes generally recommend Level 5 or 6 classification in reading, Level 5 classification in English, and/or mathematics as appropriate. Students with a reading level of 5 may enroll in baccalaureate-level classes if Level 6 is not a prerequisite. Students with a reading level of 3 or 4 are not eligible for baccalaureate classes having a Level 5 or 6

prerequisite. Placement in Level 6, 5, 4, or 3 is based on student's performance on the placement assessment (ASSET).

Note: English levels equate to Level 6 eligible for ENGL B1a, Level 5 eligible for ENGL B1, Level 4 eligible for ENGL B60, Level 3 eligible for ACDV B68. Reading levels equating to Level 5 and 6 meet the BC graduation competency requirements, Level 4 eligible for ACDV B50, Level 3 eligible for ACDV B62, Level 2 eligible for ACDV B91, and Level 1 referral for additional testing. Math levels equate to Level 6 eligible for Math B6a; Level 5 eligible for Math B1; Level 4 eligible for Math BC, B2, B16, B22, or B23; Level 3 eligible for Math BD; Level 2 eligible for Math BA; and Level 1 eligible for Math B50. Beginning in Summer 1998, eligibility levels were reversed so that 6 became highest and 1 lowest.

Course Descriptions

The following abbreviations are commonly used in the course descriptions: lect (lecture); lab (laboratory); demo (demonstration), disc (discussion); 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 not shown, course may not be repeated. See policy on course repetition.

The semester in which a course is offered is indicated by using an "F" for fall and an "S" for spring and "SS" for summer. If there is no designation, the course is offered irregularly and students should contact the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Every attempt will be made to schedule courses as indicated; however, sometimes the college may not be able to do so.

Prerequisites

Prerequisites are expressed as minimum requirements. For example, with a grade of "C" means that a grade of "C" or higher is acceptable. If a prerequisite is recommended only, it means that it is possible, but difficult, to successfully complete the course without that prerequisite. This applies to both course and skill (reading, writing, or mathematics level) prerequisites.

All prerequisites may be challenged and may be waived if the challenge is upheld. See the Dean of Students for specific information and procedures.

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
 Precollegiate-Discipline Specific
 Precollegiate-Basic Skills
 Community Education-Personal
 Community Education-Parenting
 Community Education-Community and Civic Development
 Occupational Education

Catalog Abbreviations**Academic Development**

ACDV Academic Development

Agriculture

AGBS Agriculture Business
 AGRI Agriculture
 ANSC Animal Science
 CRPS Crop Science
 FORE Forestry
 HORT Horticulture
 NRES Natural Resources Management
 ORNH Ornamental Horticulture
 SOIL Soils

Allied Health

EMTC Emergency Medical Care
 GERO Gerontology
 MEDS Medical Science
 RADT Radiologic Technology
 NURS Nursing
 VNRS Vocational Nursing

Applied Science and Technology

ACRF Air Conditioning and Refrigeration
 APRD Automated Production and Manufacturing Processes
 Technology
 AUTO Automotive
 CNST Construction
 ELET Electrical Technology
 ENVT Environmental Technology
 INDR Industrial Drawing
 INDT Industrial Technology
 WTRT Water Technology
 WELD Welding
 WOOD Wood

Art

ART Art

Behavioral Sciences

ANTH Anthropology
 BEHS Behavioral Science
 GERO Gerontology

HMSV Human Services
 PSYC Psychology
 SOCI Sociology

Biological Science

BIOL Biology

Business Education

BUS Business
 ACCT Accounting
 BSAD Business Administration
 MGMT Management
 MKTG Marketing
 OFFT Office Technology
 REAL Real Estate
 SMBS Small Business

Communications

CMMN Communication
 JRNL Journalism
 SPCH Speech

Computer Studies

COMS Computer Studies

English

ENGL English

Ethnic Studies

CHST Chicano Studies
 HIST History

Family and Consumer Education

CHDV Child Development
 FACE Family and Consumer Education
 FAMS Family Studies
 FDSV Food Service
 GERO Gerontology
 NUTR Nutrition

Foreign Languages

ASL American Sign Language
 ENSL English as a Second Language
 FREN French
 GERM German
 JAPN Japanese
 RUSS Russian
 SPAN Spanish

Health and Physical Education

HLED Health Education
 PHED Physical Education

Independent and Special Studies

ANTH Anthropology
 ART Art
 BIOL Biology
 FDSV Food Service

INDT Industrial Technology
 MATH Mathematics
 PHSC Physical Science
 PSYC Psychology
 SOCI Sociology
 SPST Special Studies

Library

LIT Library and Information Technology

Mathematics

MATH Mathematics

Music

MUSC Music

Philosophy

PHIL Philosophy

Physical Science

ARCH Architecture
 ASTR Astronomy
 CHEM Chemistry
 ENGR Engineering
 GEOG Geography
 GEOL Geology
 PHSC Physical Science
 PHYS Physics

Public Administration

ADMJ Administration of Justice
 CADM Correctional Administration
 FIRE Fire Technology
 PADM Public Administration

Senior Studies

SENS Senior Studies

Social Science

ECON Economics
 HIST History
 POLS Political Science

Student Development

STDV Student Development

Theatre Arts and Dance

DANC Dance
 THEA Theatre Arts

Work Experience

WEXP Work Experience

Transferability of Bakersfield College Courses

Transfer courses in the Bakersfield College curriculum are generally numbered 1 through 49. Associate Degree only courses are for the primary purpose of meeting requirements for an Associate in Arts Degree or an Associate in Science Degree and certificate programs. These courses are designated Not Transferable. Each course is listed in one of the following categories:

Not Transferable: Not degree applicable

Not Transferable: Associate Degree only

California State University (CSU) and private colleges

University of California System (UC), CSU and private colleges

Articulation and Transferability

Most of the courses listed in this catalog are articulated with specific courses at four-year colleges and universities. This means that those colleges and universities will accept the corresponding Bakersfield College course as equivalent to the course they offer.

In some cases Bakersfield College offers courses that are taught at the baccalaureate level but do not have a lower-division equivalent at one of the four-year schools to which BC students commonly transfer. Sometimes these courses are technical in nature and might even be offered in the upper division or graduate level at four-year schools. These courses are transferable but not articulated. They will be accepted for elective baccalaureate credit but do not satisfy a specific course equivalent.

ASSIST

ASSIST is a computerized student-transfer information system that can be accessed over the World Wide Web (www.assist.org). It displays reports of how course credits earned at one California college or university can be applied when transferred to another. ASSIST is the official repository of articulation for California's colleges and universities and, therefore, provides the most accurate and up-to-date information available about student transfer in California. For further information, see a counselor or advisor.



*Academic
Development*

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

ACADEMIC DEVELOPMENT

ACDV B5 Tutor Training and Practicum (2 units)

Essential human relations skills and methods of effective tutoring, placing these skills into practice with tutees referred by the Tutor Coordinator. Student may be referred by subject area instructor(s). **Prerequisite:** Minimum grade of "B" in subject to be tutored or approval of subject area instructor or evaluation of prerequisites by the Tutor Trainer and/or Tutor Coordinator. **Recommended:** Reading Level 6. **Hours:** (72) 1 lect/disc, 3 supervised tutoring. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

ACDV B5a Tutor Training and Practicum (0.5 unit)

Essential human relations skills and methods of effective tutoring, placing these skills into practice with tutees referred by the Tutor Coordinator. Students may be referred by subject area instructor(s). **Prerequisite:** Minimum grade of "B" in the subject to be tutored or approval of subject area instructor and successful completion of specific training in tutoring methods or evaluation of prerequisite by the Tutor Trainer and/or Tutor Coordinator. **Recommended:** Reading Level 6. **Hours:** (36) 1/2 lect/disc, 1 1/2 supervised tutoring. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

ACDV B50 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. Emphasizes critical reading critical thinking, and reading flexibility with college-level material (poetry, short stories, essays, textbook chapters). Focuses on application, analysis, synthesis, and evaluation in both oral and written form. Includes responding, summarizing, and outlining. **Prerequisite:** Reading Level 4 or successful completion of ACDV B62. **Hours:** (54) 3 lect. **Offered:** F, S, SS. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ACDV B52 Basic Tools for College Success (3 units)

An opportunity for students to learn and adopt skills proven to promote success in college, including study skills and personal life skills. Increases the Level 3 reader's probability of success in college. **Recommended:** Reading Level 3. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ACDV B62 Developing Basic Reading Skills (3 units)

Recommended for students who need to improve vocabulary, reading rate and flexibility, and reading comprehension. Includes basic techniques of reading for study purposes and on-site library assignment. Practice in application and analysis level of thinking. **Prerequisite:** Reading Level 3 or ENSL B51 with a minimum grade of "C" or ACDV B91 with a minimum grade of "C." **Recommended:** Concurrent enrollment in ACDV B201a. **Hours:** (54) 3 lect. **Offered:** F, S, SS. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ACDV B66 Student Success (1-3 units)

Covers the development of successful personal behaviors; interpersonal skills development, effective listening and note taking, time management, textbook reading, math computation, and test taking skills necessary for success in connected core courses. **Prerequisite:** Concurrent enrollment in ACDV B280 or B281. See instructor to determine which co-requisite course is appropriate. **Hours:** (18-54 each) 1-3 lect. **Repeat:** 3. **CCS:** Precollegiate - Basic Skills. **Not Transferable:** Not degree applicable. Note: Formerly ACDV B66abcd.

ACDV B68 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. **Recommended:** Reading Level 3, English Level 3 or recommendation of a Bakersfield College English instructor or counselor. Bilingual/bi-cultural students should have successfully completed ENSL B55ab. **Hours:** (72) 4 lect/disc. **Offered:** F, S, SS. **Repeat:** 1. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ACDV B70a-f Study Skills (0.5 unit each. 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: B70a-Time Management; B70b-Notetaking; B70c-Textbook Reading; B70d-Test Taking; B70e-Memory; B70f-Vocabulary. (Credit/No Credit) **Recommended:** Reading Level 4 or satisfactory completion of ACDV B62. **Hours:** (15) 2 lect, 3 lab arranged for 3 weeks for each 0.5 unit. **Offered:** F, S, SS. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ACDV B74 Paragraph Writing Strategy (2 units)

Emphasizes paragraph development, including writing a variety of paragraphs; expository, sequential, narrative, process, compare and contrast, and descriptive. **Prerequisite:** Referral by Learning Disabilities Specialist or Supportive Services Counselor. **Recommended:** Reading Level 3, English Level 4, recommendation of Strategies Model Instructor. **Hours:** (36) 2 lect/disc. **Offered:** F, S. **Repeat:** 1. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ACDV B75 Sentence Writing Strategy (4 units)

Course emphasizes mastering basic English sentence structure and how to write four kinds of sentences: simple, compound, complex, and compound-complex. **Prerequisite:** Students must have recommendation of the Learning Disabilities Specialist or Supportive Services Counselor. **Recommended:** Reading Level 3, English Level 2, recommendation of Strategies Model instructor. **Hours:** (72) 4 lect/disc. **Offered:** F, S, SS. **Repeat:** 1. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ACDV B76 Specialized Learning Strategies (1.5 units)

Specifically designed for Supportive Services students. Emphasis is placed on teaching specific strategies to improve testing and proof-reading skills. **Prerequisite:** Students must have recommendation of the Learning Disabilities Specialist or Supportive Services Counselor. **Recommended:** Reading Level 2, English Level 3. **Hours:** (27) 1.5 lect/disc. **Repeat:** 1. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ACDV B78 Understanding Basic Math (3 units)

Recommended for DSPS Program students. Emphasis is on basic arithmetic operations including whole numbers, decimals, percents, and operations for circles, areas, perimeters and volume. **Prerequisite:** Recommendation of the Learning Disabilities Specialist or Supportive Services Counselor. **Recommended:** Reading Level 3, English Level 3. **Hours:** (54) 3 lect. **Offered:** F, S, SS. **Repeat:** 1. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ACDV B79ab Special Basic Skills Practice (1-2 units)

Recommended for Supportive Services students. Emphasizes small group instruction in four reading strategies including SLANT (classroom participation) CHIPS and OVER (text-book surveys) and ASK IT (self questioning) **Prerequisite:** Referral by Supportive Services Counselor or Learning Disabilities Specialist. **Recommended:** Reading Level 1, English Level 2, Study Skills Level 3. **Hours:** (36-72) 4 lab for 9 weeks. **Repeat:** 1. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ACDV B91 Communication Skills (3 units)

Provides classroom and prescriptive training in vocabulary development, listening, responding (both orally and in writing), basic study habits, and reading, Practice in knowledge, comprehension, and application levels of thinking. Supervised practice within class and lab periods. Individual prescriptions may include a broad range of communication skills or be limited to specific problems. **Recommended:** Reading Level 2. English Level 3, concurrent enrollment in ACDV B201a. **Hours:** (90) 2 lect, 3 lab. **Offered:** F, S, SS. **Repeat:** 1. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ACDV B190 Assistive Technology for Students with Disabilities (.5 units)

Students are introduced to the assistive technology they need based on functional limitations presented by their disabilities. **Recommended:** Admission to Supportive Services Program, evaluation by Supportive Services Counselor or Learning Disabilities Specialist. **Hours:** (9) 1 lect for 9 weeks. **Offered:** F, S. **Repeat:** 3. **CCS:** Precollegiate-Basic Skills. **Not Transferable:** Not degree applicable.

ACDV B195 Word Processing for Students With Disabilities (2 units)

Fundamentals of word processing using methods and materials designed for students with various disabilities. **Recommended:** Reading Level 1, English Level 2. **Hours:** (54) 2 lect, 1 lab. **Offered:** F, S, SS. **Repeat:** 1. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ACDV B196 Strategic Learning System (2 units)

Students learn to use a complete learning system that incorporates strategies for understanding, integrating and remembering information from texts and lectures as well as strategies to prepare for and take tests. **Prerequisite:** Reading Level 4 or satisfactory completion of ACDV B62. Concurrent enrollment in designated lecture course coordinated with ACDV B196. **Recommended:** English Level 4 or satisfactory completion of ACDV B68/75 or ENSL B3. **Hours:** (42) 3 lect/disc for 14 weeks. **Repeat:** 1. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable. **Note:** Not open to students who have taken the equivalent course, CHDV B196.

ACDV B201ab Communication Skills (0.5-1 units, limit 4 units)

Individually prescribed lessons in spelling, reading, vocabulary development, study skills, critical thinking and/or English. Supervised repetition and practice in the laboratory on assigned tasks which may range from general communication skills to specific problems. **Hours:** (27-54) 1.5 lab per 0.5 unit. Open entry/open exit. **Offered:** F, S, SS. **Repeat:** 3 or until 4 units is reached. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ACDV B201A Reading**ACDV B201B Writing****ACDV B222A Tutoring in ADD (Auditory Discrimination in Depth) (0.5-3 units. Limit 8 units)**

Recommended for students who have an auditory conceptualization problem. Students will learn techniques to decode words. **Prerequisite:** Referral by Learning Disabilities Specialist or counselor. **Recommended:** Reading Level 2, English Level 3, student should have three or more errors on the extended LAC test. **Hours:** (16-96) 16 lab/tutoring per 0.5 unit. Open entry/open exit. **Repeat:** 3, or up to 8 units as long as progress is demonstrated. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable. **Note:** Identical to ACDV B122a except that it is open entry/open exit within a semester, not beyond a semester.

ACDV B280 Supervised Tutoring (0 units)

Provides tutoring in various academic subjects, conducted in a designated learning center, to augment classroom instruction. **Prerequisite:** Referral by subject-area instructor or counselor. **Recommended:** Referral by self for specific remediation. **Hours:** (2-85) 2-5 individualized instruction and supervised lab. Open entry/open exit. **Offered:** F, S, SS. **Repeat:** 3. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ACDV B281abc Supervised Tutoring-Computer (0 units)

Provides tutoring in various academic subjects, conducted in a computer lab, to augment classroom instruction. **Prerequisite:** Referral by subject-area instructor or counselor. **Recommended:** Referral by self for specific remediation. **Hours:** (3-162) 3-9 individualized instruction and supervised lab. Open entry/open exit. **Offered:** F, S, SS. **Repeat:** Unlimited. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ACDV B281a Reading**ACDV B281b Writing****ACDV B281c Mathematics****ACDV B292 Spelling (0.5-1 units. Limit 2 units)**

Recommended for students who have persistent spelling problems. Individually prescribed laboratory work with tapes and exercises. **Hours:** (18-36) 1 lab per 0.5 unit. Open entry/open exit within a semester but not beyond a semester. **Offered:** F, S, SS. **Repeat:** 3 or until 2 units is reached. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

Agriculture

Agricultural Business Management

Agriculture

Animal Science

Crop Science

Environmental Horticulture

Forestry

Horticulture

Natural Resources Management

The Bakersfield College Agriculture Department offers: Certificates of Achievement, Associate Degree Programs, and Transfer Program. All Agriculture programs should be carefully planned by the student with assistance from the Agriculture Department Advisor and departmental instructors.

Transfer Program

Students may use those units accumulated in the Associate Degree Programs for transfer to a four-year institution. Students must also complete the general education courses required for certification by the UC or CSU system.

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 and Ornamental Horticulture. Each program must be approved by the Agriculture Department advisor and Department Chairman.

Agricultural Business Management Certificate

Required Courses: 30 units

Course Number	Title	Units
AGBS B2 or AGBS B52	Agricultural Economics Economics in Agriculture	3.0
AGBS B4	Computer Application in Agriculture	3.0
AGRI B10	Introduction to California Agriculture	3.0
AGRI B249ab or AGRI B248ab or AGRI B49	Cooperative Work Experience Education Cooperative Work Experience Education Agriculture Leadership Training	2.0
ANSC B1 or ANSC B51	Introduction to Animal Science Basic Animal Science	3.0
CRPS B1 or CRPS B51 or ORNH B2	Principles of Crop Production Introduction to Crop Production Fundamentals of Nursery Management and Plant Production	3.0
SOIL B1	Introduction to Soil Science	3.0

Electives: at least 10 units

Animal Science Certificate

Required Courses: 31 units

Course Number	Title	Units
AGBS B4	Computer Application in Agriculture	3.0
AGRI B10	Introduction to California Agriculture	3.0
AGRI B248ab or AGRI B249ab	Cooperative Work Experience Education Cooperative Work Experience Education	3.0
ANSC B1 or ANSC B51	Introduction to Animal Science Basic Animal Science	3.0
ANSC B2 or ANSC B3 or ANSC B4 or ANSC B10	Beef Production Sheep Production Dairy Production Horse Production	3.0

ANSC B6	Applied Animal Nutrition	4.0
ANSC B7	Livestock Diseases	3.0
CRPS B2 or NRES B1	Forage Crops Range Management	3.0
SOIL B1	Introduction to Soil Science	3.0

Electives: at least 3 units

Crop Science Certificate

Required Courses: 30 units

Course Number	Title	Units
AGBS B2 or AGBS B52	Agricultural Economics Economics in Agriculture	3.0
AGBS B4	Computer Application in Agriculture	3.0
AGRI B10	Introduction to California Agriculture	3.0
AGRI B248ab or AGRI B249ab or AGRI B49	Cooperative Work Experience Education Cooperative Work Experience Education Agriculture Leadership Training (2.0)	3.0
CRPS B1 or CRPS B51	Principles of Crop Production Introduction to Crop Production	3.0
CRPS B2	Forage Crops	3.0
CRPS B4	Vegetable Production	3.0
SOIL B1	Introduction to Soil Science	3.0

Electives: at least 6 -7 units

Forestry Certificate

Required Courses: 34 units

Course Number	Title	Units
AGRI B10	Introduction to California Agriculture	3.0
AGRI B248ab or AGRI B249ab	Cooperative Work Experience Education Cooperative Work Experience Education	3.0
ANSC B6	Applied Animal Nutrition	4.0
FORE B1 or FORE B51	Introduction to Forestry Principles of Forestry	3.0
FORE B2	Natural Resources	3.0
FORE B3	Wildlife Management	3.0
FORE B4 or FORE B5	Wildlife Law Enforcement Identification of California Wildlife	3.0
FORE B6	Forestry Skills	3.0
NRES B1	Range Management	3.0
NRES B2	Parks and Outdoor Recreation	3.0
SOIL B1	Introduction to Soil Science	3.0

Environmental Horticulture Certificate

Required Courses: 33 units

Course Number	Title	Units
ORNH B1 or AGRI B10	Introduction to Ornamental Horticulture Introduction to California Agriculture	3.0
ORNH B2	Fundamentals of Nursery Management and Plant Production	3.0
ORNH B3	Landscape Installation and Maintenance	3.0
ORNH B4	Plant Propagation	3.0
ORNH B5	Nursery Management	3.0
ORNH B6	Ornamental Plant Identification - Ground Covers, Vines, and Dwarf Shrubs	3.0
ORNH B7	Ornamental Plant Identification - Large Shrubs, Small Trees, Large Trees & Palms	3.0
ORNH B8	Introduction to Landscape Design	3.0
SOIL B1	Introduction to Soil Science	3.0

AGRI B248ab or	Cooperative Work Experience Education	3.0
AGRI B249ab	Cooperative Work Experience Education	

Electives: at least 3 units of Agriculture

ASSOCIATE IN ARTS DEGREE PROGRAMS

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

Agricultural Business Management

The Agricultural Business Management major is made up of agriculture and agricultural 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: 18 units

Course Number	Title	Units
AGBS B2 or AGBS B52	Agricultural Economics Economics in Agriculture	3.0
AGBS B4	Computer Application in Agriculture	3.0
AGRI B10	Introduction to California Agriculture	3.0
AGRI B49 or AGRI B248ab	Agriculture Leadership Training Cooperative Work Experience Education	2.0
CRPS B1 or CRPS B51 or ORNH B2 or	Principles of Crop Production Introduction to Crop Production Fundamentals of Nursery Management and Plant Production	3.0
CRPS B2	Forage Crops	
CRPS B4	Vegetable Production	
ANSC B1	Introduction to Animal Science	
SOIL B1	Introduction to Soil Science	3.0

Electives: at least 1 unit

Course Number	Title	Units
ANSC B1	Introduction to Animal Science	3.0
ANSC B51	Basic Animal Science	3.0
ANSC B2	Beef Production	3.0
ANSC B3	Sheep Production	3.0
ANSC B4	Dairy Production	3.0
ANSC B6	Applied Animal Nutrition	4.0
ANSC B7	Livestock Diseases	3.0
ANSC B10	Horse Production	3.0
AGRI B248ab	Cooperative Work Experience Education	3.0
AGRI B249ab	Cooperative Work Experience Education	3.0
CRPS B2 or ORNH B2	Forage Crops Fundamentals of Nursery Management and Plant Production	3.0
CRPS B4 or ORNH B4	Vegetable Production Plant Propagation	3.0
FORE B2	Natural Resources	3.0
ORNH B6	Ornamental Plant Identification - Ground Covers, Vines, and Dwarf Shrubs	3.0
ORNH B7	Ornamental Plant Identification - Large Shrubs, Small Trees, Large Trees and Palms	3.0

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: 18 units

Course Number	Title	Units
AGRI B10	Introduction to California Agriculture	3.0
AGRI B49	Agriculture Leadership Training	2.0
ANSC B1	Introduction to Animal Science	3.0
ANSC B6	Applied Animal Nutrition	4.0
ANSC B7	Livestock Diseases	3.0
CRPS B2 or SOIL B1 or NRES B1 or ANSC B2 or ANSC B3 or ANSC B4 or ANSC B10	Forage Crops Introduction to Soil Science Range Management Beef Production Sheep Production Dairy Production Horse Production	3.0

Other suggested courses

Course Number	Title	Units
AGBS B2	Agricultural Economics	3.0
AGBS B52	Economics in Agriculture	3.0
AGBS B4	Computer Application in Agriculture	3.0
AGRI B248ab	Cooperative Work Experience Education	3.0
AGRI B249ab	Cooperative Work Experience Education	3.0
CRPS B1	Principles of Crop Production	3.0
NRES B1	Range Management	3.0
CRPS B2	Forage Crops	3.0
SOIL B1	Introduction to Soil Science	3.0

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.

Required Courses: 18 units

Select 18 units from the following courses:

Course Number	Title	Units
AGBS B2 or AGBS B52	Agricultural Economics Economics in Agriculture	3.0
AGBS B4	Computer Application in Agriculture	3.0
AGRI B10	Introduction to California Agriculture	3.0
CRPS B1 or CRPS B51	Principles of Crop Production Introduction to Crop Production	3.0
CRPS B2	Forage Crops	3.0
CRPS B4	Vegetable Production	3.0
SOIL B1	Introduction to Soil Science	3.0

Other suggested courses

Course Number	Title	Units
ANSC B1	Introduction to Animal Science	3.0
ANSC B51	Basic Animal Science	3.0
AGRI B248ab	Cooperative Work Experience Education	3.0
AGRI B249ab	Cooperative Work Experience Education	3.0

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AGRI B49	Agriculture Leadership Training	2.0
ORNH B2	Fundamentals of Nursery Management and Plant Production	3.0
ORNH B4	Plant Propagation	3.0

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. Students planning to go to work after completing a 2-year degree should complete the A.S. degree.

Required Courses: 21 units

Select 21 units from the following courses:

Course Number	Title	Units
AGBS B4	Computer Application in Agriculture	3.0
AGRI B10	Introduction to California Agriculture	3.0
AGRI B49	Agriculture Leadership Training	2.0
AGRI B248ab or AGRI B249ab	Cooperative Work Experience Education	3.0
ANSC B1 or ANSC B51	Introduction to Animal Science Basic Animal Science	3.0
ANSC B6	Applied Animal Nutrition	4.0
FORE B1 or FORE B51	Introduction to Forestry Principles of Forestry	3.0
FORE B2	Natural Resources	3.0
FORE B3 or FORE B5	Wildlife Management Identification of California Wildlife	3.0
FORE B4	Wildlife Law Enforcement	3.0
FORE B6	Forestry Skills	3.0
FORE B7	Wildland Fire Management	3.0
NRES B1	Range Management	3.0
NRES B2	Parks and Outdoor Recreation	3.0
SOIL B1	Introduction to Soil Science	3.0
ORNH B4 or ORNH B6 or ORNH B7	Plant Propagation Ornamental Plant Identification - Ground Covers, Vines, and Dwarf Shrubs Ornamental Plant Identification - Large Shrubs, Small Trees, Large Trees & Palms	3.0

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 18 units

Course Number	Title	Units
AGBS B4	Computer Application in Agriculture	3.0
AGRI B10	Introduction to California Agriculture	3.0
AGRI B49	Agriculture Leadership Training	2.0
CRPS B1 or CRPS B51	Principles of Crop Production Introduction to Crop Production	3.0

ORNH B6	Ornamental Plant Identification - Ground Covers, Vines, and Dwarf Shrubs	3.0
SOIL B 1	Introduction to Soil Science	3.0

Electives: at least 1 unit

Course Number	Title	Units
AGBS B2 or AGBS B52	Agricultural Economics Economics in Agriculture	3.0
ORNH B4	Plant Propagation	3.0

Environmental Horticulture

The Environmental Horticulture major prepares students for all types of careers in the nursery and landscaping industries. Students may elect to secure employment at the end of the two-year program or transfer to a four-year university.

Required Courses: 30 units

Course Number	Title	Units
ORNH B1 or ORNH B51 or AGRI B10	Introduction to Ornamental Horticulture Basic Ornamental Horticulture Introduction to California Agriculture	3.0
ORNH B2	Fundamentals of Nursery Management and Plant Production	3.0
ORNH B3	Landscape Installation and Maintenance	3.0
ORNH B4	Plant Propagation	3.0
ORNH B5	Nursery Management	3.0
ORNH B6	Ornamental Plant Identification - Ground Covers, Vines, and Dwarf Shrubs	3.0
ORNH B7	Ornamental Plant Identification - Large Shrubs, Small Trees, Large Trees & Palms	3.0
ORNH B8	Introduction to Landscape Design	3.0
SOIL B1	Introduction to Soil Science	3.0

Electives: at least 3 units

ASSOCIATE IN SCIENCE DEGREE PROGRAMS

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

Agricultural Business Management

Required Courses: 30 units

Course Number	Title	Units
AGRI B248ab or AGRI B249ab	Cooperative Work Experience Education	3.0
AGBS B2 or AGBS B52	Agricultural Economics Economics in Agriculture	3.0
AGBS B4	Computer Applications in Agriculture	3.0
AGRI B10	Introduction to California Agriculture	3.0
ANSC B1 or ANSC B51 or ANSC B6 or ANSC B7	Introduction to Animal Science Basic Animal Science Applied Animal Nutrition (4.0) Livestock Diseases	3.0
CRPS B1 or CRPS B51 or ORNH B2 or	Principles of Crop Production Introduction to Crop Production Fundamentals of Nursery Management and Plant Production	3.0
CRPS B2 or CRPS B4 or ORNH B4	Forage Crops Vegetable Production Plant Propagation	

FORE B2	Natural Resources	3.0
FORE B3	Wildlife Management	3.0
SOIL B1	Introduction to Soil Science	3.0

Electives: at least 3 units

Animal Science

Required Courses: 31 units

Select 25 units from the following courses:

Course Number	Title	Units
ANSC B1 or ANSC B51	Introduction to Animal Science Basic Animal Science	3.0
ANSC B6	Applied Animal Nutrition	4.0
ANSC B7	Livestock Diseases	3.0
AGRI B10	Introduction to California Agriculture	3.0
AGRI B49	Agriculture Leadership Training	2.0
AGRI B248ab or AGRI B249ab	Cooperative Work Experience Education Cooperative Work Experience Education	3.0
AGBS B2 or AGBS B52	Agricultural Economics Economics in Agriculture	3.0
AGBS B4	Computer Applications in Agriculture	3.0
CRPS B2	Forage Crops	3.0
NRES B1	Range Management	3.0
SOIL B1	Introduction to Soil Science	3.0

Select 6.0 units from the following:

Course Number	Title	Units
ANSC B2	Beef Production	3.0
ANSC B3	Sheep Production	3.0
ANSC B4	Dairy Production	3.0
ANSC B10	Horse Production	3.0

Crop Science

Required Courses: 30 units

Course Number	Title	Units
AGRI B10	Introduction to California Agriculture	3.0
AGRI B49 or AGRI B 248ab or AGRI B249ab	Agriculture Leadership Training Cooperative Work Experience Education Cooperative Work Experience Education	2.0
AGBS B2	Agricultural Economics	3.0
AGBS B52	Economics in Agriculture	3.0
AGBS B4	Computer Application in Agriculture	3.0
ANSC B1 or ANSC B6 or ANSC B7 or ANSC B51	Introduction to Animal Science Applied Animal Nutrition Livestock Diseases Basic Animal Science	3.0
CRPS B1 or CRPS B51	Principles of Crop Production Introduction to Crop Production	3.0
CRPS B2 or ORNH B2	Forage Crops Fundamentals of Nursery Management and Plant Production	3.0
CRPS B4 or ORNH B4	Vegetable Production Plant Propagation	3.0
SOIL B1	Introduction to Soil Science	3.0

Electives: at least 1 unit

Forestry

Required Courses: 30 units

Select 30 units from the following courses:

Course Number	Title	Units
AGBS B4	Computer Application in Agriculture	3.0
AGRI B10	Introduction to California Agriculture	3.0
AGRI B49	Agriculture Leadership Training	2.0
AGRI B248ab or AGRI B249ab	Cooperative Work Experience Education Cooperative Work Experience Education	3.0
AGBS B2 or AGBS B52	Agricultural Economics Economics in Agriculture	3.0
ANSC B6	Applied Animal Nutrition	4.0
CRPS B2	Forage Crops	3.0
FORE B1 or FORE B51	Introduction to Forestry Principles of Forestry	3.0
FORE B2	Natural Resources	3.0
FORE B3	Wildlife Management	3.0
FORE B4	Wildlife Law Enforcement	3.0
FORE B5	Identification of California Wildlife	3.0
FORE B6	Forestry Skills	3.0
FORE B7	Wildland Fire Management	3.0
NRES B1	Range Management	3.0
NRES B2	Parks and Outdoor Recreation	3.0
SOIL B1	Introduction to Soil Science	3.0
ORNH B6 or ORNH B2 or ORNH B7 or ORNH B4	Ornamental Plant Identification - Ground Covers, Vines, and Dwarf Shrubs Fundamentals of Nursery Management And Plant Production Ornamental Plant Identification - Large Shrubs, Small Trees, Large Trees & Palms Plant Propagation	3.0

Environmental Horticulture

Required Courses: 37 units

Course Number	Title	Units
AGRI B10 or ORNH B1 or ORNH B51	Introduction to California Agriculture Introduction to Ornamental Horticulture Basic Ornamental Horticulture	3.0
ORNH B2	Fundamentals of Nursery Management and Plant Production	3.0
ORNH B3	Landscape Installation and Maintenance	3.0
ORNH B4	Plant Propagation	3.0
ORNH B5	Nursery Management	3.0
ORNH B6	Ornamental Plant Identification - Ground Covers, Vines, and Dwarf Shrubs	3.0
ORNH B7	Ornamental Plant Identification - Large Shrubs, Small Trees, Large Trees and Palms	3.0
ORNH B8	Introduction to Landscape Design	3.0
AGBS B4	Computer Application in Agriculture	3.0
SOIL B1	Introduction to Soil Science	3.0
BIOL B10	Plant Biology	4.0

Electives: at least 3 units

Pre-Veterinary Medicine Option

See Agriculture faculty advisor. 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.

Suggested Courses

Course Number	Title	Units
AGRI B248 or AGRI B249	Cooperative Work Experience Education	3.0
ANSC B1	Introduction to Animal Science	3.0
ANSC B6	Applied Animal Nutrition	4.0
ANSC B7	Livestock Diseases	3.0
BIOL B3a	General Biology I	5.0
BIOL B3b	General Biology II	5.0
CHEM B1a	General Chemistry	5.0
CHEM B1b	General Chemistry and Chemical Analysis	5.0
CHEM B8	Elementary Organic Chemistry	3.0
CHEM B9	Organic Chemistry Laboratory	3.0
MATH B22	Elementary Probability and Statistics	5.0
PHYS B2a	General Physics-Mechanics and Heat	4.0
PHYS B2b	General Physics-Sound, Light, Electricity, Magnetism, Modern Physics	4.0

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

AGRICULTURAL BUSINESS MANAGEMENT

AGBS B2 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. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

AGBS B4 Computer Application in Agriculture (3 units)

Operation of computer systems and equipment in agriculture. Emphasizes use of personal computers and software programs in WordStar, WordPerfect, dBase II and Lotus 1-2-3. **Recommended:** Reading Level 5 or 6. **Hours:** (81) 3 lect, 1.5 lab. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. (CAN AG 2)

AGBS B52 Economics in Agriculture (3 units)

Introduction to agricultural economics at the local, state and national level. Ag industry business practices, operations and careers. Competition, demand and economic future of agriculture. **Recommended:** Reading 5 or 6. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

AGRICULTURE

Credit limitations may apply. For specific information see a counselor or the transfer institution.

AGRI B10 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 educational planning requirement for graduation from Bakersfield College. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

AGRI B49 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. **Recommended:** Reading Level 5 or 6. **Hours:** (72) 1 lect, 3 lab. Field trips required. **Offered:** F, S. **Repeat:** 3. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

AGRI B248ab Cooperative Work Experience Education (1-8 units. Limit 16 units)

See WEXP B248ab description.

AGRI B249ab Cooperative Work Experience Education (1-4 units. Limit 16 units.)

See WEXP B249ab description.

ANIMAL SCIENCE

ANSC B1 Introduction to Animal Science (3 units)

Scientific and practical aspects of meat animals, horse and dairy cattle, care and management. Emphasizes the nutrition, breeding selection, anatomy and physiology, slaughtering, processing and marketing will be stressed. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

ANSC B2 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, production costs, marketing and herd management. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 2 lect, 3 lab. Field trips required. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ANSC B3 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. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 2 lect, 3 lab. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ANSC B4 Dairy Production (3 units)

Emphasizes the scientific and practical aspects of dairy animals, care and management. Nutrition, breeding selection, anatomy and physiology, production and marketing will be stressed. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 2 lect, 3 lab. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ANSC B6 Applied Animal Nutrition (4 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. **Hours:** (108) 3 lect, 3 lab. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ANSC B7 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. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ANSC B10 Horse Production (3 units)

Horse production in the United States. Emphasis is on breeds, nutrition, reproduction and horse behavior. Horse farm management and horse training will be stressed. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 2 lect, 3 lab. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and Private colleges.

ANSC B51 Basic Animal Science (3 units)

History of the animal science industry in the United States. Topics include production, marketing, breeds and nutrition. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

ANSC B60 Bovine Reproduction (2 units)

Beef and dairy cattle reproduction management. Emphasis is on semen evaluation, artificial insemination technique, estrus synchronizing, reproductive diseases and embryo development and transfer. **Recommended:** Reading Level 5 or 6. **Hours:** (72) 2 lect, 6 lab for 9 weeks. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

ANSC B71 Diseases of Beef and Dairy Cattle (1 unit)

Common disease problems in beef and dairy cattle with emphasis on Kern County. Includes cause, symptoms, prevention and recommended treatment. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 2 lect for 9 weeks. Field trips required. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

ANSC B72 Equine Health (1 unit)

Prevention, symptoms, control and treatment of diseases of horses. Meets the needs of the horse owner or stable manager and taught by a graduate veterinarian who is currently practicing veterinary medicine in Kern County. **Hours:** (18) 2 lect for 9 weeks and selected field trips. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

ANSC B74 Equine Nutrition (1 unit)

A series of lectures covering the various phases of horse nutrition. Designed for the horse owner or trainer. **Hours:** (18) 2 lect for 9 weeks and selected field trips. Field trips required. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

ANSC B76 Equine Reproduction (1 unit)

Equine Reproductive Management: Emphasis on understanding the male and female equine reproductive tracts, anatomy, physiology, endocrinology of cycles, artificial insemination techniques, embryonic development, and reproductive diseases. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 2 lect. for 9 weeks. Field trip required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CROP SCIENCE

Credit limitations may apply, For specific information see a counselor

CRPS B1 Principles of Crop Production (3 units)

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 cereal crops. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** Odd-numbered years. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

CRPS B2 Forage Crops (3 units)

Study of the common forage crops: alfalfa, common pasture grasses and legumes. Varieties, adaptations, methods of handling and procession. Seeding and seed bed preparation. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 2 lect, 3 lab and/or selected field trips. Field trips required. **Offered:** Even-numbered years. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

CRPS B4 Vegetable Production (3 units)

Principles and practices of vegetable crop production. Methods used in seeding, propagation and culture of vegetables and the application of the principles underlying vegetable production techniques. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 2 lect, 3 lab. Field trips required. **Offered:** F. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges. Elective credit only.

CRPS B51 Introduction to Crop Production (3 units)

Introduction to the crop science industry in Kern County, California and the nation. Topics include basic botany, vegetative growth, plant classification and marketing of crops. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FORESTRY

Credit limitations may apply. For specific information see a counselor or the transfer institution.

FORE B1 Introduction to Forestry (3 units)

The ecological, economic and sociological basis of forest management interrelated with the management of other resources. Topics include a history of forestry in America, the economics of forestry, forestry and national planning and forest uses. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **Offered:** F. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

FORE B2 Natural Resources (3 units)

Survey of our natural resources and the conservation of those uncaptured natural stores which are useful to humankind. Resources covered are water, soil, air, forests, grasslands, wildlife, oceans, minerals and energy. Ecology, waste management and human resources are also covered. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

FORE B3 Wildlife Management (3 units)

The practice of wildlife management. Foundations of wildlife production. The identification, life histories and ecology of selected important wildlife species - mammals including fur bearers, water fowl and fish. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **Offered:** S.

CCS: Occupational Education. **Transferable:** CSU and private colleges.

FORE B4 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. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

FORE B5 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. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

FORE B6 Forestry Skills (3 units)

Survey of the forestry, wildlife and natural resources management industries. Careers, job requirements, terminology, employment opportunities and the identification and/or use of selected tools and equipment. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 2 lect, 3 lab. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

FORE B7 Wildland Fire Management (3 units)

Covers the physical theories of wildland fire, the methodology of wildland fire suppression, pre-suppression, and post-fire suppression and equipment. The practice of fire ecology and the use of prescribed control burns to maintain and improve our nation's forests and rangelands. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trip required. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

FORE B51 Principles of Forestry (3 units)

History and uses of forests in America. Topics include forestry protection, terminology, legislation and production. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

HORTICULTURE

HORT B51 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. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S. **Repeat:** 3. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

NATURAL RESOURCES MANAGEMENT

NRES B1 Range Management (3 units)

Basic range management and improvement practices. Proper utilization of rangeland resources. Overview of multiple use principles. Maintenance and improvement of range plant communities. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 2 lect, 3 lab. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

NRES B2 Parks and Outdoor Recreation (3 units)

Introduction to national, state, county, city, and private park systems. History, philosophy, policy and principles of the formation, administration and functioning of recreational units at the park, district and regional levels. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ORNAMENTAL HORTICULTURE

Credit limitations may apply. For specific information, see a counselor.

ORNH B1 Introduction to Ornamental Horticulture (3 units)

Survey of the ornamental horticulture industry, including floriculture, nursery production, retail nurseries, landscaping. Career possibilities explored. Overview of basic botany concepts. **Hours:** (90) 2 lect, 3 lab. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ORNH B2 Fundamentals of Nursery Management and Plant Production (3 units)

Commercial nursery operation. Propagation media, nursery designs, propagation, structures, seedage, cuttage, plant structure, rooting aids, transplanting, stepping up, and potting. Principles of sexual and asexual propagation. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 2 lect, 3 lab. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ORNH B3 Landscape Installation and Maintenance (3 units)

Covers the planning, installation and maintenance of landscapes in Kern County and California. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 2 lect, 3 lab. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ORNH B4 Plant Propagation (3 units)

Principles of sexual propagation, seedage, and asexual propagation, budding, grafting, cuttings layering, division and separation. Principles of tissue culture. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 2 lect, 3 lab. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ORNH B5 Nursery Management (3 units)

Commercial nursery operations. Propagation, propagation media, nursery design, propagation structures, plant structure, rooting aids, transplanting, stepping up and potting greenhouse and nursery plants. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 2 lect, 3 lab. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only.

ORNH B6 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 and the surrounding mountains. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 2 lect, 3 lab. Field trips required. **Offered:** F. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

ORNH B7 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 and the surrounding mountains. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 2 lect, 3 lab. Field trips required. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

ORNH B8 Introduction to Landscape Design (3 units)

Study of the need for landscaping in modern man's environment. Covers residential application, basic drafting, site and user analysis. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 2 lect, 3 lab. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ORNH B35 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. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 9 lect for 2 weeks. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ORNH B51 Basic Ornamental Horticulture (3 units)

Introduction to the ornamental horticulture industry including career opportunities. Overview of basic botany and soil structure. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

ORNH B78 Landscape Maintenance/Laws and Regulations of Pest Control (1 unit)

Designed for students interested in securing the landscape pest control certificate required of all professional landscape gardeners who apply chemicals. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 2 lect for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

ORNH B79 Landscape Pest Management (1 unit)

For students interested in the Qualified Applicator Certificate. Includes information about the certification examination, turf pest, insects and mite control, weed control, and mushroom control in lawns. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 2 lect for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

ORNH B80 Pesticide Application and Safety (1 unit)

Designed for professional applicators, advisors or students entering the field of pesticide management. Equipment and safe procedures involving supervision, minimum exposure, fitting/use of a respirator and label interpretation. Application techniques, including right-of-way, non-crop weed control and soil incorporated insecticides. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 2 lect for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

SOIL

SOIL B1 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. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 2 lect, 3 lab. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges. (CAN AG 14)



Allied Health

Emergency Medical Technician

Medical Science

Nurse Assistant

Radiologic Technology

Registered Nurse

Vocational Nurse

ENROLLMENT TO ALLIED HEALTH PROGRAMS

I. Statement of philosophy concerning enrollment into Allied Health 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. Enrollment Procedures

A. Determination of eligibility for enrollment: 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 allied health 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 enrollment 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. Costs of meeting health requirements are paid by student.

- a. Physical Examinations - This exam is to be completed AFTER the student receives notification of enrollment into the program. The applicant must have a level of emotional and physical health necessary to meet program requirements.
- b. Immunizations/health tests - As needed for acceptance in a clinical and training facility, and to protect the health and welfare of the student and community. Immunization may include, but not be limited to, rubella and Hepatitis B. Tuberculosis screening is also required.
- c. Drug and Alcohol Screening - As a condition of enrollment to any Allied Health Program with a clinical component, all students are required to submit to, and pass, a designated drug and alcohol screen.

3. Eligibility for Enrollment

Applicants who have completed their enrollment forms, have their high school and college transcripts on file, and have met the educational and health requirements will be designated as eligible

for enrollment. Information regarding criteria for selection may be obtained in the Allied Health Office.

- 4. Students will be required to purchase uniforms, textbooks and selected equipment and provide transportation to off-campus sites for clinical experience and pay current college fees.

If an Allied Health Program has more applicants for enrollment than space available, priority is provided to residents of the Kern Community College District.

NOTE: Students with a misdemeanor and/or felony arrest or conviction *may* not receive certification or licensure from the State or County. Call Allied Health, 395-4281 for more information.

Emergency Medical Technology Programs

Emergency Medical Technician I

This is a 120-hour certificate program (13-week course) which will prepare the student to perform basic emergency care as part of the mobile emergency care team. EMTC B1 certification is required by the state in order to function in emergency patient care. Student must meet the Allied Health Department health requirements.

A class of students begins each semester. At the end of the course, those students who successfully complete the course will be certified by the Kern County Emergency Medical Services for a two-year period. Re-certification every two years is required to maintain EMTC B1 status (see EMTC B1r course description).

Physical Examination/Drug and Alcohol Screening/Program Supplies Information

See Enrollment to Allied Health Programs.

Nurse Assistant

The nurse assistant precertification program is a one-semester program that prepares the student to perform basic patient care as a nurse assistant health care worker. Students successfully completing both the Basic Patient Skills course and the laboratory component will be eligible to take the State of California, Certified Nurse Assistant examination. For enrollment in the Basic Patient Skills laboratory course, the student must meet health requirements. For more information, contact the Office of Career Development and Workforce Preparation at 395-4089 for a program brochure.

Required Academy Courses: 11.5 units

Course Number	Title	Units
MEDS B67	Basic Patient Skills	3.0
MEDS B67L	Basic Patient Skills Laboratory	2.0
MEDS B60	Medical Terminology	2.0
ACDV B66	Student Success	3.0
OFFT B252a	Computer Keyboarding, Beginning, Part 1	1.0
SPST B48	Special Studies: Honors	0.5

Physical Examination/Drug and Alcohol Screening/ Program Supplies Information

See Enrollment to Allied Health Programs.

Primary Care Associate (Physician's Assistant)

See Biological Science Department

RADIOLOGIC TECHNOLOGY

Radiologic Technology is a health care profession whose practitioners work in hospitals, imaging centers, and private physicians' offices. The radiologic technologist (radiographer) is a member of the health care 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 Program provides concurrent didactic and clinical education. The program is 24 months in length (excluding prerequisite coursework) and begins each year in June.

The program provides the theory, skill and experience necessary to apply for admission to the certification exam administered by the American Registry of Radiologic Technologists (AART); and for certification from the State of California, Department of Health Services as a Certified Radiologic Technologist (CRT). The student is also eligible to write the State Fluoroscopy Permit exam. Students must earn a minimum of "C" in all radiography and related general education courses and have met all clinical education competencies to be recommended for these examinations/certifications.

Radiologic Technology Program Mission and Goals

The mission of the Bakersfield College Radiologic Technology Program is to promote student success by providing quality instruction for graduates to competently practice radiography at the entry level.

The Program promotes its mission by preparing graduates to:

- 1) Succeed by the establishment of fair and informative educational practices;
- 2) maintain and promote professional ethics;
- 3) recognize and apply quality patient care of management in cooperation with the healthcare team;
- 4) maintain a safe environment for the patient, healthcare team and self;
- 5) apply the knowledge and skills of imaging principles to produce diagnostic radiographs;
- 6) effectively communicate, critically think and problem solve;
- 7) competently perform radiography procedures; and
- 8) receive an associate degree in radiologic technology and be eligible to write both the national certification exam administered by the ARRT and the California CRT exam.

Radiologic Technology Program Prerequisite Requirements

All prerequisite coursework must be completed prior to the start of the program. When there are more applicants for enrollment than space available, priority is provided to applicants with all prerequisite courses completed at the time of submitting an enrollment form.

The following courses must be completed with a "C" grade or higher (except where otherwise noted):

1. BIOL B14 **and** BIOL B15 **OR** BIOL B18 at BC or equivalent course at another accredited college.
2. MATH BD/B200D (Intermediate Algebra) at BC **or** equivalent course at another accredited college or completion of high school Algebra 2 with a minimum grade of "B."
3. MEDS B60 (3 units) at BC or equivalent course at another accredited college.
4. Eligibility for ENGL B1a as demonstrated by qualifying scores on the BC assessment tests; or completion of ENGL B1 at BC; or an equivalent course from another accredited college with a minimum grade of "C."
5. Graduation from high school or an equivalent education.

Enrollment in the Radiologic Technology Program

Enrollment Filing Period

Enrollment forms must be received by the Radiologic Technology Program Office during the month of February for the program scheduled to start in June.

Enrollment Procedures

1. Complete required prerequisite courses (see above).
2. Enrollment forms for the Radiologic Technology Program may be obtained in the Allied Health Division, Room 178 of the Math-Science Building, OR in the Counseling Center located in the Student Services building on the main campus.
3. **Official** transcripts for all high school and college coursework must also be submitted and mailed directly to Radiologic Technology Program, Bakersfield College, 1801 Panorama Drive, Bakersfield, CA 93305. All transcripts must be received during the application dates listed above.
4. Students not enrolled must reapply for each program cycle to keep their file active. If the student does not reapply, the file will be destroyed.

NOTE: Equivalent courses taken at other accredited colleges must be verified by *official* transcripts. Requests for consideration of course equivalency must be made by the student to the Bakersfield College Admissions and Records Office, (661) 395-4301. It is the student's responsibility to see that the equivalency is provided to the program within the enrollment filing period.

General Education Requirements

General education courses are required to graduate from the Bakersfield College Associate Degree Radiologic Technology Program, and it is suggested that most be completed prior to admission into the program:

1. English - English B1 minimum required; English B1a recommended
2. Speech - Speech B1 or B2
3. Social Science - History B17a or other Social Science* course
4. Behavioral Science - Psychology B1a recommended
5. Humanities - Philosophy B12 recommended or other Humanities* course
6. Computer Science (3 units) - COMS B2 or COMS B5 or equivalent is necessary to meet program completion requirements.
7. All other graduation requirements of the college must be met to receive the A.S. degree in Radiologic Technology. An individual who has previously received an associate degree or higher may apply for the A.S. degree in Radiologic Technology providing all requirements have been met.

*See BC General Education Requirements.

Physical Examination/ Drug and Alcohol Screening/ Program Information

1. A physical examination completed by a physician of the student’s choice will be required after enrollment into the program to demonstrate that a student meets the technical standards* necessary to meet the objectives of the program. Appropriate immunizations and/or vaccinations are also required. These are done at the student’s expense.
2. As a condition of enrollment to any Allied Health Program with a clinical component, all students are required to submit to and pass a designated drug and alcohol screen. This will be done at the student’s expense.
3. Students will be required to purchase uniforms, textbooks and selected equipment and provide transportation to off-campus sites for clinical education and pay current college fees. The student should be aware that books, uniforms, fees and required equipment for the first year of the program cost approximately \$700-\$850. The following semesters require books and registration fees.
4. A copy of the “Essential Technical Standards” required for Radiologic Technologists may be obtained in the Allied Health Division Office.

Note: Record of any conviction, misdemeanor or felony is subject to review by the American Registry of Radiologic Technologists (ARRT) before certification may be granted. Anyone who wishes clarification may contact the ARRT, 1225 Northland Drive, St. Paul, MN 55120-1155, (651) 687-0048.

Accreditation

The Radiologic Technology Program is nationally accredited by the Joint Review Committee on Education in Radiologic

Technology (JRCERT), 20 N. Wacker Drive, Suite 900, Chicago, Illinois 60606-2901, (312) 704-5300. The program is also accredited by the State of California, Department of Health Services, Radiologic Health Branch, P.O. Box 942732, Sacramento, CA 94234-7320, (916) 445-0931.

Associate Degree Radiologic Technology Program

The following courses are taken after students have been enrolled in the Radiologic Technology Program.

First Summer

Course Number	Title	Units
RADT B1a	Introduction to Radiologic Technology	2.0
RADT B4a	Introduction to Clinical Education	1.0
MEDS B67	Basic Patient Skills	3.0
MEDS B67L	Basic Patient Skills Lab (optional)	2.0
TOTAL		6.0 - 8.0

First Fall Semester

Course Number	Title	Units
RADT B2a	Radiographic Anatomy and Positioning 1	3.0
RADT B3a	Radiographic Principles 1	3.0
RADT B4b	Clinical Education 1	4.0
	General Education (if needed)	3.0
TOTAL		10-13.0

First Spring Semester

Course Number	Title	Units
RADT B2b	Radiographic Anatomy and Positioning 2	3.0
RADT B3b	Radiographic Principles 2	3.0
RADT B6	Clinical Education 2	5.0
RADT B9c	Principles of Angiography	1.0
TOTAL		12-15.0

Second Summer

Course Number	Title	Units
RADT B7	Clinical Education 3	6.0

Second Fall Semester

Course Number	Title	Units
RADT B2c	Radiographic Anatomy and Positioning 3	3.0
RADT B5	Radiation Physics	3.0
RADT B10	Clinical Education 4	7.5
	General Education (if needed)	3.0
TOTAL		13.5-16.5

Second Spring Semester

Course Number	Title	Units
RADT B9a	Sectional Anatomy for Medical Imaging	3.0
RADT B11	Radiographic Pathology	2.0
RADT B12	Radiobiology and Radiation Protection	2.0
RADT B13	Clinical Education 5	6.5
RADT B30	Principles of Venipuncture	1.0
TOTAL		14.5

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, Doctorate in Nursing and special certifications. This role of a new graduate is usually that of a staff nurse. With additional education, a nurse may advance to a position of supervisor, administrator, clinical specialist, educator, or researcher.

Curriculum Framework

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-spiritual being.
3. The personal and professional development of the student to prepare for the role of a Registered Nurse.

ENROLLMENT IN THE ASSOCIATE DEGREE PROGRAM

General Information

1. This is a four-semester Associate Degree Nursing Program (ADN). Students must also complete all the Bakersfield College General Education Requirements for graduation in addition to the prerequisite courses.
2. Upon successful completion of the ADN Program, graduates are eligible to take the National Council Licensure Examination for licensure as a Registered Nurse.

Enrollment Filing Periods

1. Month of February for fall semester.
2. Month of September for spring semester.
3. All enrollment forms must be received in the Allied Health Office during the stated filing period. Forms received prior to these dates will be returned. Late forms will not be accepted.

Enrollment Procedures

1. Obtain enrollment form from the BC Allied Health Office in room MS 178 or the Counseling Center located in the Student Services building on the main campus or by telephone, 395-4281.
2. Arrange for *official* copies of all college transcripts to be mailed directly to the Associate Degree Nursing Program, Bakersfield College, 1801 Panorama Dr., Bakersfield, CA 93305. Students attending BC must furnish a BC transcript.
3. Students not enrolled must complete program enrollment forms each semester in order to remain on the waiting list.

Prerequisite Course Requirements

All prerequisite courses must be completed prior to the start of the program with a "C" grade or higher. When there are

more students filing enrollment forms than space available, priority is provided to students with all prerequisite courses completed at time of submission of enrollment form.

- a. MATH BA/B200a at BC or an equivalent course at another accredited college, or two semesters of high school algebra.
- b. *CHEM B11 or CHEM B15 and B16, or CHEM B1a or CHEM B2a or B49 at BC or an equivalent course at another accredited college. (Students who plan to complete the BC ADN program and later pursue their bachelor's in nursing at Cal State University, Bakersfield are advised to take CHEM B15 and B16.)
- c. BIOL B14 at BC or equivalent course at another accredited college.
- d. BIOL B15 at BC or equivalent course at another accredited college.
- e. BIOL B16 at BC or equivalent course at another accredited college.
- f. ENGL B1a at BC or equivalent course at another accredited college.
- g. Graduation from high school or equivalent education.
- h. Computer studies (1 unit) or evidence of proficiency.
- i. Nurse Assistance course/certification.
- j. Basic healthcare provider CPR card current within one year.
- k. Overall cumulative GPA of 2.5.
- l. Completion of Nursing Readiness Exam (administered on first day of class).
- m. MEDS B60 Medical Terminology – highly recommended

*Note: BC science faculty recommends CHEM B15 and B16 or CHEM B2a and B16 or CHEM B1a and B16.

General Education Courses

1. The following courses are also required to graduate from the Bakersfield College ADN Program and it is suggested that most of them be completed prior to enrollment in the program:
 - a. *SPCH B1 or B2 or B3
 - b. HIST B17a or other social science course
 - c. PSYC B1a
 - d. SOCI B1 or ANTH B2
 - e. PHIL B12 or other humanities course

*SPCH B1 is recommended for CSU nursing transfers.

Note: Equivalent courses taken at other accredited colleges must be verified by official transcripts. Requests for consideration of courses for equivalency must be made to the Bakersfield College Admissions and Records Office.

Associate Degree Nurse Program

The following courses are taken after students have been formally enrolled in the ADN Program.

First Semester

Course Number	Title	Units
NURS B1	Nursing Fundamentals	3.0
NURS B1L	Nursing Fundamentals Laboratory	3.0
NURS B1g	Gerontological Nursing	1.0

NURS B1gL	Gerontological Nursing Laboratory	1.5
NURS B31a	Basic Pharmacology – Nursing Concepts	1.5
NURS B31b	Medication Calculations	0.5
	TOTAL	10.5

Second Semester

Course Number	Title	Units
NURS B3a	Medical/Surgical Nursing	2.0
NURS B3aL	Medical/Surgical Nursing Laboratory	2.5
NURS B7	Parent/Newborn Nursing	1.5
NURS B7L	Parent/Newborn Nursing Lab	1.5
NURS B32	Advanced Pharmacology	2.0
	TOTAL	9.5

Third Semester

Course Number	Title	Units
NURS B3b	Medical/Surgical Nursing	2.0
NURS B3bL	Medical/Surgical Nursing Laboratory	2.0
NURS B6	Pediatric Nursing	1.5
NURS B6L	Pediatric Nursing Laboratory	1.5
NURS B8	Psychiatric/Mental Health Nursing	2.0
NURS B8L	Psychiatric/Mental Health Nursing Laboratory	1.5
	TOTAL	10.5

Fourth Semester

Course Number	Title	Units
NURS B9	Advanced Medical/Surgical Nursing	3.0
NURS B9L	Advanced Medical/Surgical Nursing Laboratory	5.0
NURS B10	Nursing Management/Leadership	1.5
	TOTAL	9.5

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 12 Credit/No Credit units which may be applied toward the AA and AS degrees at Bakersfield College.

Physical Examination/Drug and Alcohol Screening

See Enrollment to Allied Health Programs.

Program Supply Information

Students will be required to purchase uniforms, textbooks and selected equipment, provide transportation to off-campus clinical education sites and pay current college fees. An estimated cost for books, uniforms, fees and required equipment for the first term of the Program is approximately \$900.00. Second and third semesters usually only require registration fees and books. In addition to registration fees and books, the ADN fourth semester’s expenses will include Program Completion activities, Program pin, ATI test, and State Board application fees.

NOTE: Record of any misdemeanor and/or felony is subject to review by the Board of Registered Nursing before an R.N. license may be granted. Anyone who wishes clarification may

contact the Board of Registered Nursing, 400 R Street, Suite 4030, Sacramento, CA 95814, (916) 322-3350.

LVN to Associate Degree Nurse Program

General Information

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.

Enrollment Filing Periods and Procedures

See Enrollment Periods and Enrollment Procedures Associate Degree Nurse

Prerequisite Course Requirements

The prerequisite course requirements are the same as the Associate Degree Nursing Program except for the requirements of CNA and Medical Terminology. It is recommended that students audit NURS B3a. A current Vocational Nurse license must be presented for verification.

General Education Requirements

The General Education Requirements are the same as for the Associate Degree Nursing Program.

NOTE: Equivalent courses taken at other colleges must be verified by official transcripts. Requests for consideration of courses for equivalency must be made to the Bakersfield College Admissions and Records Office.

Required Nursing Courses

The following courses are taken after students have been formally enrolled for advanced placement in the ADN Program.

Third Semester

Course Number	Title	Units
NURS B3b	Medical/Surgical Nursing	2.0
NURS B3bL	Medical/Surgical Nursing Laboratory	2.0
NURS B8	Psychiatric/Mental Health Nursing	2.0
NURS B8L	Psychiatric/Mental Health Nursing Laboratory	1.5
NURS B32	Advanced Pharmacology	2.0
NURS B70	Bridging Nursing Theory (recommended to be taken prior to entering program)	2.5
	TOTAL	12.0

Fourth Semester

Course Number	Title	Units
NURS B9	Advanced Medical/Surgical Nursing	3.0
NURS B9L	Advanced Medical/Surgical Nursing Laboratory	5.0
NURS B10	Nursing Management/Leadership	1.5
	TOTAL	9.5

Future Transfer Students

Students who plan to obtain their bachelor's degree in nursing at California State University, Bakersfield after completing the Bakersfield College ADN Program will need to take NUTR B10 and PSYC B40 at BC prior to transfer. In addition, there may be other General Education courses required. Contact the Counseling Center for further information at 395-4421.

Physical Examination/Drug and Alcohol Screening

See Enrollment to Allied Health Programs

Program Supplies

Students will be required to purchase uniforms, textbooks and selected equipment, provide transportation to off-campus sites for laboratory experience, and pay current college fees. These costs total approximately \$900.

NOTE: Record of any misdemeanor and/or felony is subject to review by the Board of Registered Nursing before an R.N. license may be granted. Anyone who wishes clarification may contact the Board of Registered Nursing, 400 R Street, Suite 4030, Sacramento, CA 95814, (916) 322-3350.

LVN to Non-Degree Nurse (30 unit option)

Students seeking information regarding the 30-unit option preparation for the registered nurse licensing examination may receive further information from the Director of the Associate Degree Nursing Program.

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 college.

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.
2. Challenge examination 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.

Vocational Nursing

Vocational Nursing at Bakersfield College is a three-semester *certificate* program. Upon successful completion of the VN

program, graduates are eligible to take the National Council Licensure Examination for Practical Nurses for licensure as a Vocational Nurse.

Curriculum Framework

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-spiritual being.
3. The personal and professional development of the student to prepare for the role of a Vocational Nurse.

Enrollment Filing Period

One VN class is accepted to begin every three semesters. Enrollment forms are accepted in the Allied Health Division in February for fall semester admission and September for spring semester admission. ***Enrollment forms received prior to these dates will be returned.*** Enrollment forms are accepted in September 2002 for the next program start in spring 2003.

Enrollment Procedures

1. Submit a completed enrollment form during the correct period. Forms may be obtained from the BC Allied Health Division or the Counseling Center located in the Student Services building on the main campus.
2. Provide proof of graduation from high school or equivalent education (GED).
3. Arrange for official copies of high school and college transcripts to be mailed directly to the Allied Health Division, Bakersfield College, 1801 Panorama Drive, Bakersfield, CA 93305. Students attending BC must furnish a BC transcript.
4. Provide assessment scores if needed (see note below).
5. Students not admitted must complete program enrollment forms each enrollment filing period in order to remain on the waiting list.

Prerequisite Course Requirements

Students may *apply* for Vocational Nursing Program Enrollment while prerequisite courses are in progress, but must submit evidence of successful completion of all prerequisite courses prior to the start date of the enrollment semester.

1. The following courses must be completed with a minimum grade of "C."
 - a. BIOL B18 (Essentials of Human Anatomy and Physiology) or equivalent course at another accredited college.
 - b. PSYC B1a (General Psychology) or equivalent course at another accredited college.
 - c. MATH BA/B200A (Elementary Algebra) or equivalent score on the BC assessment test or two semesters of high school algebra. Assessment scores must be provided by the applicant prior to the application deadline.

2. Other prerequisite requirements:
 - a. Eligibility for ENGL B1a on the current BC assessment test, or completion of ENGL B1 at BC.
 - b. Graduation from high school or equivalent education (GED).
 - c. Nurse Assistant course or certification
 - d. Computer studies course (introduction to computer courses) or equivalent course at another accredited college or documentation of proficiency. Note: This course may be taken during the VN program, but must be completed prior to the beginning of the 2nd semester of the program.
 - e. MEDS B60 (Medical Terminology) highly recommended.

Vocational Nursing Program

The following courses are taken after students have been formally accepted into the Vocational Nursing Program.

First Semester

Course Number	Title	Units
NURS B1	Nursing Fundamentals	3.0
NURS B1Lv	Medical-Surgical Nursing I Laboratory	6.0
NURS B1g	Gerontological Nursing	1.0
NURS B31a	Basic Pharmacology – Nursing Concepts	1.5
NURS B31b	Medication Calculations	0.5
VNRS B75	Medical-Surgical Nursing I	3.5
	Total	15.5

Second Semester

Course Number	Title	Units
VNRS B80	Medical-Surgical Nursing II	4.0
VNRS B80Lv	Medical-Surgical II Laboratory	3.0
VNRS B81	Medical-Surgical Nursing III	4.0
VNRS B81Lv	Medical-Surgical III Laboratory	3.0
NURS B50	Advanced Pharmacology	1.0
	Total	15.0

Third Semester

Course Number	Title	Units
NURS B6	Pediatric Nursing	1.5
NURS B7	Parent/Newborn Nursing	1.5
VNRS B91Lv	Parent/Newborn, Pediatric Laboratory	3.0
VNRS B90	Medical-Surgical Nursing IV	4.5
VNRS B90Lv	Medical-Surgical IV Laboratory	3.0
	Total	13.5

NOTE: The laboratory components of all nursing courses are graded on credit/no credit basis only.

Physical Examination/Drug and Alcohol Screening

See Enrollment to Allied Health Programs.

VN Students are exempt from the maximum of three credit/no credit units which may be taken in a semester and from the maximum of 12 credit/no credit units which may be applied toward the AA and AS degrees at Bakersfield College.

Program Supplies Information

Books, uniforms, fees and required equipment for the first semester of the program cost approximately \$900. The following semester requires books and registration fees. Third semester expenses include program completion costs of nursing pin and State Board application fees.

NOTE: Record of any misdemeanor and/or felony is subject to review by the Board of Vocational Nurse and Psychiatric Technician Examiners before a VN license may be granted. Anyone who wishes clarification may contact the Board of Vocational Nursing & Psychiatric Technicians 2535 Capitol Oaks Drive, Suite 205, Sacramento, CA 95833 (916) 263-7800.

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

EMERGENCY MEDICAL TECHNICIAN

EMTC B1 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. The student must meet Allied Health Division health requirements to participate in the laboratory section of course. Any expenses involved in meeting the health requirements are the students' responsibility. **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. **Offered:** F, S. **Repeat:** As necessary for state EMS regulations. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

EMTC B1R 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 EMTC B 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 1 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. **Offered:** S. **Repeat:** As often as necessary for recertification. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

GERONTOLOGY

Other Gerontology courses are listed in the Behavioral Science and Family and Consumer Education Departments.

GERO B30 Health and Wellness in Aging (3 units)

Health and wellness are important variables in determining the length and quality of our later years. This course includes consumer level information regarding physiology, acute and chronic illness, medications, physical activity, nutrition, sexuality, pros and cons of health care delivery systems, death and dying, prevention, health promotion and alternative therapies. Research interpretation of professional journals and varied news media. Information intended for individuals over 50 and students of biology, dietetics, social work, psychology, sociology, recreation, and allied health professions. **Recommended:** Reading Level 5. Concurrent enrollment in GERO B230. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only.

GERO B230 Health and Wellness in Aging: Computer Lab (1 unit)

Provides supervised laboratory time during which students may obtain hands-on-experience getting practice using assessment forms to evaluate the health and wellness status of persons age 50. **Prerequisite:** GERO B30 (may be taken concurrently). **Hours:** (54) 3 lab. Open entry/open exit. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MEDICAL SCIENCE

MEDS B35 Life Span Development (3 units)

Study of normal human growth and development in prenatal, childhood, adolescent, adult and old age periods. A balanced study of basic theories, research, applications, and principles of physiological, cognitive, and psychosocial development are discussed. Related observations are required. Health maintenance and safety issues for all age levels are incorporated. Concepts of death and dying are considered. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect, field trip required.

Offered: F, S **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges.

MEDS B51 Exploring Health Care Occupations (2 units)

Designed to assist students in understanding the scope of practice of health care career options. The students will be given an overview of several health care careers and will acquire the abilities needed to research the basic skills and educational requirements needed for health care careers. Assist students in becoming more aware of own interests, values, and skills which will help in directing their educational plan. **Hours:** (36) 2 lect. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not Degree applicable.

MEDS B60 Medical Terminology (2-3 units)

A study of some basic medical terms related to the major body systems. Three units are required for registered and vocational nursing, radiologic technology, medical billing and transcribers. Two units are recommended for nursing assistant and emergency medical technician students. **Hours:** (36-54) 2-3 lect/disc. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MEDS B65 Cardiac Rhythm Interpretation (2 units)

Interpretation of basic cardiac rhythms in health related field settings. Heart anatomy, physiology, dysrhythmia interpretation, and interventions. **Hours:** (36) 2 lect. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MEDS B66 Intravenous Therapy and Blood Withdrawal (2 units)

Enables health care providers to safely initiate and maintain intravenous therapy and withdraw venous blood in a medical setting. Course is approved by the California Board of Vocational Nursing and Psychiatric Technician Examiners. **Hours:** (36) 3 lect, 1 lab for 9 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MEDS B67 Basic Patient Skills (3 units)

Foundation skills for basic caregivers. Topics include role of caregiver, healthcare environments, healthcare safety, adult needs in health and illness and basic caregiving skills. **Recommended** MEDS B60. **Hours:** (54) 6 lect for 9 weeks. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MEDS B67L Basic Patient Skills Laboratory (2 units)

Foundation skills for basic caregivers. Topics include role of caregiver, healthcare environment, healthcare safety, adult needs in health and illness and basic caregiving skills. **Prerequisite:** Concurrent enrollment or previous completion of MEDS B67. **Hours:** (108) 12 lab for 9 weeks. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

RADIOLOGIC TECHNOLOGY

RADT B1a Introduction to Radiologic Technology (2 units)

Orientation to the duties and responsibilities of the Radiologic Technologist. Emphasizes the medical use of radiation, interpersonal communication, ethics, radiation safety and protection, foundations and futures of medicine and radiology, hospital and departmental operations, professional development and quality assurance. Assistance in understanding program requirements. **Prerequisite:** Acceptance in the Radiologic Technology Program. **Hours:** (36) 6 lect for 6 weeks. **Offered:** SS. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

RADT B2a Radiographic Anatomy and Positioning 1 (3 units)

Instruction and laboratory practice in radiographic positioning of the chest, abdomen, lower and upper extremities with correlated film anatomy. **Prerequisites:** Completion of first summer session of Radiologic Technology Program. **Hours:** (90) 2 lect, 3 lab. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

RADT B2b Radiographic Anatomy and Positioning 2 (3 units)

Instruction and laboratory practice in radiographic positioning of the vertebral column, bony thorax, gastrointestinal, biliary and urinary systems with correlated film anatomy. **Prerequisites:** Completion of second semester of Radiologic Technology Program. **Hours:** (90) 2 lect, 3 lab. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

RADT B2c Radiographic Anatomy and Positioning 3 (3 units)

Instruction and laboratory practical experience in skull, reproductive system, mammography, and related pediatric exams, with correlated film anatomy. **Prerequisites:** Completion of second summer session of Radiologic Technology Program. **Hours:** (90) 2 lect, 3 lab. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

RADT B3a Radiographic Principles 1 (3 units)

Principles of x-ray image creation, basic radiation protection, technical factors affecting the x-ray beam, beam restriction, filtration, and radiation absorption. Covers accessory supplies and equipment, grids, intensifying screen and holders, radiographic film, processing and sensitometry. **Prerequisites:** Completion of first summer session of Radiologic Technology Program. **Hours:** (90) 2 lect, 3 lab. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

RADT B3b Radiographic Principles 2 (3 units)

Principles of radiographic image analysis including density, contrast recorded detail and distortion. Manipulation of exposure factors, automatic exposure control, and quality control analysis. Principles of mobile radiography, fluoroscopy and tomography. **Prerequisites:** Completion of first fall semester of Radiologic Technology Program. **Hours:** (90) 2 lect, 3 lab. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

RADT B4a Introduction to Clinical Education (1 unit)

Orientation to clinical education including introduction to patient transportation techniques, film processing, office reception and filing procedures. Observation and introduction to basic radiographic procedures stressing radiation safety and protection. Techniques of cardiopulmonary resuscitation. **Prerequisites:** Acceptance into the radiologic technology program. **Hours:** (54) 8 clinical experience for 6 weeks and 6 hours by arrangement. **Offered:** SS. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

RADT B4b Clinical Education I (4 units)

Supervised clinical experiences are provided to develop skills in basic radiographic procedures. Fundamentals of anatomy, positioning and technical factors of film quality, radiation safety and protection. **Prerequisite:** Completion of first summer session of Radiologic Technology Program. **Hours:** (288) 16 hours clinical experience. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

RADT B5 Radiation Physics (3 units)

Physics of electromagnetic radiation, electricity, current, resistance, and interaction of radiation with matter. Types of x-ray machines, circuitry, x-ray tubes, production of x-rays and radiation protection safety. **Prerequisite:** Enrollment in Radiologic Technology Program. **Hours:** (90) 5 lect/disc. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

RADT B6 Clinical Education 2 (5 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. **Prerequisite:** Completion of first semester of Radiologic Technology Program with minimum grades of "C." **Hours:** (288) 16 clinical experience to include one hour lecture. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

RADT B7 Clinical Education 3 (6 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 RADT B2a, B2b. **Prerequisite:** Completion of second semester of Radiologic Technology Program. **Hours:** (360) 40 hours clinical experience for 9 weeks to include two hours lecture. **Offered:** SS. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

RADT B9a Sectional Anatomy for Medical Imaging (3 units)

Sectional anatomy of the head and neck, spine, thorax, abdomen and pelvis. Emphasis on computed tomography and magnetic resonance images and other imaging modalities using sectional anatomy. **Prerequisite:** Completion of second summer session of Radiologic Technology Program or evaluation by instructor. **Hours:** (54) 3 lect. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

RADT B9c Principles of Angiography (1 unit)

Introduction to the principles of cardiac, pulmonary, systemic and lymphatic angiography with radiographic film correlation of anatomy. Cinefluorographic equipment and procedures are discussed. Review of angiographic trends including interventional procedures. **Prerequisite:** Concurrent enrollment in the Radiologic Technology Program or evaluation by instructor of student's x-ray technology skills. **Hours:** (18) 2 lect for 9 weeks. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

RADT B10 Clinical Education 4 (7.5 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 RADT B2c. **Prerequisite:** Completion of second summer session of Radiologic Technology Program, **Hours:** (432) 24 hours clinical experience to include one hour lecture. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

RADT B11 Radiographic Pathology (2 units)

Pathology and medical terminology pertinent to diagnostic medical radiography. Nature, causes, manifestations and treatment of disease. Imaging procedures utilized when making diagnosis. **Prerequisites:** Completion of second fall semester of Radiologic Technology Program. **Hours:** (36) 2 lect. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

RADT B12 Radiobiology and Radiation Protection (2 units)

Instruction in the fundamental concepts of radiation protection with review of current California Health and Safety codes pertaining to radiologic technology. Biological effects on living systems, as well as radiation units, dose determinations, and personnel monitoring are included. **Prerequisite:** Current enrollment in Radiologic Technology Program.

Hours: (36) 2 lect. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

RADT B13 Clinical Education 5 (6.5 units)

Supervised clinical experiences are provided to perfect skills in advanced radiographic procedures. Designed to prepare the student for program completion and certification examinations. **Prerequisite:** Completion of third semester of Radiologic Technology Program with minimum grades of "C." **Hours:** (432) 24 hours clinical experience. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

RADT B30 Principles of Venipuncture (1.0 units)

Basic instruction and practice of venipuncture methods and procedures for the administration of contrast agents. Routes of administration, safety, basic pharmacology, dosage calculations and emergency procedures. Course meets California Health and Safety Code, Section 106985, pertaining to Certified Radiologic Technologists performing venipuncture. **Prerequisite:** Current Cardiopulmonary Resuscitation Healthcare Provider Card. **Hours:** (18) 2 lect for 9 weeks. **Offered:** F, S, SS. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

RADT B50 Principles of Fluoroscopy (2 units)

Principles and techniques of fluoroscopy equipment, image intensifiers, television, image recording, devices and mobile fluoroscopy. Anatomy and physiology of the eye, three dimensional and radiologic anatomy. Fluoroscopy regulations, radiation safety and quality control. Upon successful completion of this course, the student will be eligible to apply for the State of California Fluoroscopy permit. **Prerequisite:** Hold or be eligible as a Certified Radiologic Technologist (CRT) in Diagnostic or Therapeutic Radiology within the State of California. **Hours:** (63) 5 lect, 2 lab for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

REGISTERED NURSING

NURS B1 Nursing Fundamentals (3 units)

Provides a foundation of basic nursing arts and sciences necessary for the practice of nursing. Professional issues and trends of nursing are identified along with the development of an understanding of the nursing process. Concepts of the nurse, client and health care environment, professional nursing and nursing skills, growth and development of the adult, human needs in health and illness, basic physiological needs, and providing a safe environment are presented. **Prerequisites:** Entrance in the ADN or VN Program having met program prerequisites or evaluation by program director for skills and knowledge, concurrent enrollment in NURS B1L/B1LV. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

NURS B1g Gerontological Nursing (1 unit)

Provides a foundation for basic gerontological nursing using demographics, theories of aging, and growth and development concepts as a framework for presenting the health problems and special concerns of the elderly. Legal and ethical issues and income, economics, and health care of older adults using a nursing process approach are discussed. **Prerequisites:** Entrance in the ADN or VN Program or evaluation by program director for skills and knowledge, concurrent enrollment in NURS B1gL/B1LV. **Hours:** (18) 1 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

NURS B1gL Gerontological Nursing Laboratory (1.5 units)

Correlated laboratory experiences are provided with emphasis on the geriatric client. Concepts presented in NURS B1g are applied in various geriatric care facilities. **Prerequisite:** Entrance in the ADN Program or evaluation by program director for skills and knowledge, concurrent enrollment in NURS B1g. **Hours:** (81) laboratory by arrangement. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

NURS B1L Nursing Fundamentals Laboratory (3 units)

Correlated laboratory experiences are provided with adult clients who have basic health problems. Concepts presented in NURS B 1 are applied in medical-surgical units of various hospitals. The student is guided by specific measurable laboratory objectives for each learning experience. **Prerequisite:** Entrance in the ADN Program or evaluation by program director for skills and knowledge, concurrent enrollment in NURS B1. **Hours:** (162) laboratory by arrangement. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

NURS B3a Medical/Surgical Nursing (2 units)

Provides a foundation for theoretical and technical knowledge base to care for adult clients and families. Focus is on identification and treatment of physiological and pathophysiological health problems and to promote and maintain optimal health. Coverage of health problems uses a nursing process approach. **Prerequisites:** Completion of first semester of ADN/VN program or evaluation by program director for skills and knowledge, concurrent enrollment in NURS B3aL. **Hours:** (36) 2 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

NURS B3aL Medical/Surgical Nursing Laboratory (2.5 units)

Correlated laboratory experiences are provided with emphasis on the adult client. Concepts presented in NURS B3a are applied in a variety of hospital settings. **Prerequisite:** Concurrent enrollment in NURS B3a. **Hours:** (135) Hours by arrangement. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

NURS B3b Medical/Surgical Nursing (2 units)

Builds on knowledge from NURS B3a and continues to provide theoretical and technical knowledge base to care for adult clients and families. Focus is further knowledge, identification and treatment of physiological and pathophysiological health problems in caring for clients with higher acuity and more complex comprehensive nursing needs and to promote and maintain optimal health. Coverage of health problems uses a nursing process approach. **Prerequisites:** Completion of the first and second semesters of ADN program or evaluation by program director for skills and knowledge, concurrent enrollment in NURS B3bL. **Hours:** (36) 2 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

NURS B3bL Medical/Surgical Nursing Laboratory (2 units)

NURS B3bL builds on knowledge from NURS B3aL with the continuation of correlated laboratory experiences provided with emphasis on the multiple adult and geriatric clients and families. Concepts presented in NURS B3b are applied in a variety of hospital settings. Laboratory emphasis from the previous semester changes and focuses on knowledge necessary to care for clients with higher acuity and more complex comprehensive nursing needs. **Prerequisite:** Concurrent enrollment in NURS B3b. **Hours:** (108) Hours by arrangement. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

NURS B6 Pediatric Nursing (1.5 units)

Provides a foundation for pediatric nursing using growth and development concepts as a framework for presenting health problems and special concerns of the pediatric client. Communication, anticipatory guidance, response to hospitalization, legal and ethical issues and health care of pediatric clients are discussed. **Prerequisites:** Completion of the first and second semesters of ADN/VN Program or evaluation by program director of skills and knowledge, concurrent enrollment in NURS B6L. **Hours:** (27) 1.5 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

NURS B6L Pediatric Nursing Laboratory (1.5 units)

Correlated laboratory experiences are provided with emphasis on the pediatric client. Concepts presented in NURS B6 are applied in various pediatric settings. **Prerequisites:** Completion of first and second semesters of ADN/VN Program or evaluation by program director for skills and knowledge, concurrent enrollment in NURS B6. **Hours:** (81) laboratory by arrangement. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

NURS B7 Maternal/Newborn Nursing (1.5 units)

Provides an overview of contemporary family-centered childbirth, incorporating the self-care movement and changing roles of the nurse. Legal and ethical issues of maternal/newborn nursing are discussed. Coverage of maternal/

newborn nursing uses a nursing process approach for antepartum, intrapartum, postpartum, and neonatal care. **Prerequisites:** Completion of the first semester of ADN or second semester VN program or evaluation by program director for skills and knowledge, concurrent enrollment in NURS B7L/B91LV. **Hours:** (27) 1.5 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

NURS B7L Maternal/Newborn Nursing Laboratory (1.5 units)

Correlated laboratory experiences are provided with emphasis on the maternal/newborn client. Concepts presented in NURS B7 are applied in various maternal/newborn facilities.

Prerequisite: Completion of first semester of ADN program or evaluation by program director for skills and knowledge, concurrent enrollment in NURS B7. **Hours:** (81) laboratory by arrangement. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

NURS B8 Psychiatric/Mental Health Nursing (2 units)

Provides a foundation for psychiatric/mental health nursing using the nursing process, growth and development concepts and psychosocial principles as the framework for presenting the health problems and special concerns of clients with mental/emotional or chemical dependency problems. Legal and ethical issues, communicating/responding strategies, assessment techniques and treatment approaches are discussed. **Prerequisites:** Completion of first and second semesters of ADN program or evaluation by program director for skills and knowledge, concurrent enrollment in NURS B8L. **Hours:** (36) 2 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

NURS B8L Psychiatric/Mental Health Nursing Laboratory (1.5 units)

Correlated laboratory experiences are provided with emphasis on the psychiatric/mental health client. Concepts presented in NURS B8 are applied in psychiatric and chemical dependency facilities. **Prerequisite:** Completion of first and second semesters of ADN program or evaluation by program director for skills and knowledge, concurrent enrollment in NURS B8. **Hours:** (81) laboratory by arrangement. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

NURS B9 Advanced Medical Surgical Nursing (3 units)

Focus is on the integration of all previous knowledge in assuming the leadership role of the professional nurse providing nursing care at an advanced level to clients with critical and complex disease states and to groups of clients. Coverage of health problems uses a nursing process approach. **Prerequisites:** Completion of first, second, third semesters of ADN program or evaluation by program director for skills and knowledge, concurrent enrollment in NURS B9L. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

NURS B9L Advanced Medical Surgical Nursing Laboratory (5 units)

Correlated laboratory experiences are provided with emphasis on providing care at an advanced level to clients with critical and complex disease states and to groups of clients. Concepts presented in NURS B9 and B10 are applied in a variety of healthcare facilities. **Prerequisites:** Completion of first, second, third semesters of ADN program or evaluation by program director for skills and knowledge, concurrent enrollment in NURS B9 and B10. **Hours:** (270) laboratory by arrangement. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

NURS B10 Nursing Management/Leadership (1.5 units)

Provides a foundation for nursing management/leadership using the nursing process as the framework for presenting concepts and principles of management and leadership. This course integrates all previous knowledge preparing the student to assume the leadership role of the professional nurse and to provide nursing care at an advanced level to clients with critical and complex needs and to groups of clients. Legal and ethical issues, issues of professional practice and the application of leadership skills and management techniques are discussed. **Prerequisite:** Completion of the first, second and third semesters of ADN Program or evaluation by program director for skills and knowledge, concurrent enrollment in NURS B9L. **Hours:** (27) 1.5 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

NURS B31a Basic Pharmacology – Nursing Concepts (1.5 units)

Provides a foundation for pharmacological nursing by assisting the student to acquire, comprehend, and apply essential knowledge related to drug therapy. Legal and ethical issues, nursing responsibilities, and client participation associated with medication administration are discussed. A nursing process approach is utilized throughout every aspect of drug study and drug administration. **Prerequisite:** Entrance in the first semester of the ADN or VN program or evaluation by program director or instructor for skills and knowledge. **Hours:** (27) 1.5 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Formerly part of NURS B31.

NURS B31b Medication Calculations (0.5 unit)

Provides a foundation for pharmacological calculations using the nursing process. Legal and ethical issues and nursing responsibilities associated with medication calculations are discussed. **Prerequisite:** Entrance in the first semester of the ADN or VN Program or evaluation by program director or instructor for skills and knowledge. **Recommended:** MATH BA. **Hours:** (9) 0.5 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Formerly part of NURS B31.

NURS B32 Advanced Pharmacology (2 units)

Provides a foundation of the theoretical and technical knowledge base necessary in meeting pharmacological needs of the client in a variety of settings. Professional issues and concepts for nursing practice related to intravenous therapy are presented including techniques of intravenous therapy and intravenous drug administration. **Prerequisite:** Completion of first semester of RN program or current RN licensure or evaluation by program director for skills and knowledge. **Hours:** (36) 2 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

NURS B50 Advanced VN Pharmacology (1 unit)

Designed to prepare the vocational student nurse to function safely when administering medications to a group of clients. Student will be administering medications to more complex clients and pediatric clients in the laboratory setting. Expounds on principles learned in NURS B31. **Prerequisite:** Appropriate standing in the VN Program and NURS B31 with a "C" or better. **Hours:** (18) 1 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

NURS B52 Nursing Process (1 unit)

Provides learning experience during which students gain instruction in developing nursing laboratory assignments. Covers nursing process in creating a nursing care plan and organizing data for planned delivery of client care. **Prerequisite:** Concurrent enrollment in a nursing laboratory course **Hours:** (48) Hours by arrangement. Repeat: 3. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable

NURS B70 Bridging Nursing Theory to Practice (2.5 units)

Designed for the reentry nursing student, especially the LVN who is pursuing licensure as an RN or the RN who wants to update skills to re-enter the workforce. Review of basic nursing knowledge, skills, and pharmacology. Topics covered include the nursing process, physical assessment, role transition and test-taking techniques. **Prerequisite:** LVN or RN. **Hours:** (45) 6.5 lect, 1 lab for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

NURS B253 Dysrhythmia Interpretation (0.5 unit)

Provides laboratory time during which students may obtain hands-on experience practicing ECG dysrhythmia interpretation including sinus rhythm, atrial fibrillation, atrial flutter, premature ventricular contractions, ventricular tachycardia, ventricular fibrillation, asystole, paced rhythms, and supraventricular tachycardia. Students will refine their abilities to recognize and interpret common and serious dysrhythmias, gain training and practice on a variety of rhythm strips and become effective practitioners of dysrhythmia recognition. **Prerequisite:** Concurrent enrollment in NURS B9 and B9L or evaluation by instructor of student's ECG ability. **Hours:** (9) Hours by arrangement. Open entry/open exit. **Offered:** F,

S. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

NURS B254 Arterial Blood Gas Analysis (0.5 unit)

Provides laboratory time during which students may obtain hands-on experience practicing arterial blood gas analysis. Students will refine their abilities to interpret arterial blood gases, gain training and become effective practitioners of arterial blood gas analysis. **Prerequisite:** Concurrent enrollment in NURS B9 and B9L. **Hours:** (9) Hours by arrangement. Open entry/open exit. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

NURS B255 Nursing Computer Tutorial Laboratory (0.5 unit)

Provides reinforcement and remedial instruction through the use of computer assisted instruction (CAI). Assignments would include nursing process, administering medications, how to avoid medication errors, and how to recognize conditions that need a nurse. These CAI's incorporate the nursing process, research, analysis, organization and computers. **Prerequisite:** Concurrent enrollment in a nursing course. **Hours:** (9) Hours by arrangement. Open entry/open exit. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

VOCATIONAL NURSING

Individual courses within the Vocational Nursing Program are not transferable. However, the Board of Registered Nursing (BRN) mandates that Licensed Vocational Nurses be given credit for previous education in nursing if they apply for admission to a professional nursing program.

NURS B1LV Medical-Surgical Nursing I - Laboratory (6 units)

This laboratory course is correlated with first semester theory courses in the Vocational Nursing Program. The major focus will be on learning fundamental nursing skills with application in geriatric and medical surgical settings. Incorporated is the nursing process which utilizes the skills of assessment, planning, intervention and evaluation providing a systemic approach to nursing practice. **Prerequisite:** Appropriate standing in the VN Program and concurrent enrollment in NURS B1, VNRS B75 and NURS B1G. **Hours:** (324) 18 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

VNRS B75 Medical-Surgical Nursing I (3.5 units)

Provides a study of etiology, pathophysiology, assessment, planning and evaluation of adult clients with gastrointestinal, skin, eye, ear, upper airway, nutritional, genitourinary, and fluid and electrolyte disorders. Integrated into course are beginning concepts of therapeutic use of drugs, diet therapy, and the physiological and psychosocial problems. Students are required to initiate critical thinking skills when dealing with clients and families. Concepts and skills in course are correlated in laboratory settings presented in the correspond-

ing NURS B1LV. **Prerequisite:** Appropriate standing in the VN Program and concurrent enrollment in NURS B1LV. **Hours:** (63) 3.5 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

VNRS B80 Medical-Surgical Nursing II (4 units)

Provides a study of etiology, pathophysiology, assessment, planning and evaluation of adult clients with cardiovascular, peripheral vascular and respiratory disorders. Knowledge imparted builds on nursing theory from the previous medical surgical nursing course (VNRS B75 and NURS B1) Emphasis will be placed on developing critical thinking skills. Concepts and skills in this course will be correlated in the various laboratory settings presented in the corresponding VNRS B80LV. **Prerequisite:** Appropriate standing in the VN Program and concurrent enrollment in VNRS B80LV. **Hours:** (72) 4 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

VNRS B80LV Medical-Surgical Nursing II Laboratory (3 units)

This course is correlated with the corresponding medical surgical II theory course in the Vocational Nursing Program. Focus is time management in caring for two clients, providing medications to a group of clients and improving skills learned in VNRS B75 and NURS B1LV. Incorporated in course is the utilization of intermediate assessment, planning, intervention and evaluation skills of the vocational nurse. **Prerequisite:** Appropriate standing in the VN Program and concurrent enrollment in VNRS B80. **Hours:** (162) 18 lab for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

VNRS B81 Medical-Surgical Nursing III (4 units)

A study of the etiology, pathophysiology, assessment, planning and evaluation of adult clients with musculoskeletal, connective tissue, and endocrine disorders. Knowledge imparted in course builds on the nursing theory learned in VNRS B75, NURS B1 and B1G. Emphasis is placed on ongoing development of critical thinking skills. Concepts and skills will be correlated in the various laboratory settings. **Prerequisite:** Appropriate standing in the VN Program and concurrent enrollment in VNRS B81LV. **Hours:** (72) 4 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

VNRS B81LV Medical Surgical Nursing III Laboratory (3 units)

Correlated with the corresponding medical surgical nursing III theory course VNRS B81. Focus is team leading, time management in caring for two clients, providing medications to a group of clients and improving on skills learned in Medical Surgical Nursing I. Incorporated into this course is the utilization of intermediate assessment, planning intervention and evaluation skill under clinical supervision. **Prerequisite:** Appropriate standing in the VN Program and concurrent enrollment in VNRS B81. **Hours:** (162) 18 lab for 9 weeks.

CCS: Occupational Education. **Not Transferable:** Associate Degree only.

VNRS B90 Medical-Surgical Nursing IV (4.5 units)

Provides a study of etiology, assessment, planning, intervention, and evaluation of adult clients with more complex and critical medical surgical problems and disease states, including multi-system involvement and trauma. Emphasis on advanced clinical skills. Concepts and skills correlated in the various clinical settings presented in the Medical-Surgical Laboratory. **Prerequisite:** Appropriate standing in the VN Program and concurrent enrollment in VNRS B90LV. **Hours:** (81) 4.5 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

VNRS B90LV Medical-Surgical Nursing IV Laboratory (3 units)

Course correlates with the corresponding advanced Medical-Surgical theory courses in the Vocational Nursing Program. Focus is the advanced application of skills learned in VNRS B75LV, VNRS B80LV, and VNRS B81LV. Skills will be applied in caring for the client with more complex and critical medical-surgical problems and disease states, including multi-system involvement and trauma. Incorporated in this course will be the utilization of advanced assessment, planning, intervention and evaluation skills of the vocational nurse. **Prerequisite:** Appropriate standing in the VN Program and concurrent enrollment in VNRS B90. **Hours:** (162) 18 lab for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

VNRS B91LV Maternal-Newborn, Pediatric Laboratory (3 units)

Laboratory course which is correlated with the corresponding maternal-newborn and pediatric theory courses in the Vocational Nursing Program. Incorporated is the nursing process which utilizes the skill of assessment, planning, intervention and evaluation providing a systemic approach to nursing practice. **Prerequisite:** Appropriate standing in the VN Program and concurrent enrollment in NURS B6 and NURS B7. **Hours:** (162) 18 lab for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

Applied Science and Technology

Air Conditioning & Refrigeration

Apprenticeship

Automated Production &

Manufacturing Processes Technology

Automotive Technology

Construction Technology

Electrical /Electronics Technology

Engineering Technology

Environmental Technology

Industrial Drawing/Computer Aided Design

Industrial Technology

Mechanized Agriculture

Water Technology

Welding Technology

Woodworking/Cabinetmaking Technology

Programs in the Applied Science and Technology Division prepare individuals for technical and leadership responsibilities within a broad range of industries including, but not limited to, manufacturing, food production, communications, transportation, energy, government, education, and utility services. Examples of job descriptions are production manager, quality control manager, plant/facility manager, industrial salesperson, industrial service representative, construction supervisor, safety manager, teacher, etc.

Students should develop programs with the aid of departmental counselor or advisor. Studies may lead to short-term career goals, the Certificate of Achievement 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. Some classes listed as “not transferable” may actually transfer as electives in an Industrial Arts or Technology major. Check with the departmental counselors at the college you wish to transfer to for specific details.

CERTIFICATES OF COMPLETION

Certificates of Completion are awarded for completion of a class, or short sequence of classes. The Certificate provides evidence of training in a limited area of study. Employees find these certificates helpful in demonstrating to employers that they have upgraded their current skills or developed new skills in other areas. Certificates of Completion are issued in the following areas upon completion of the classes listed with a grade of C or better. Students may apply for the certificates in the AST Division Office upon completion of the required courses.

Air Condition/Heating/Refrigeration Certificate of Completion

Required Courses: 6 units

Course Number	Title	Units
ACRF B54ab	Air Conditioning and Refrigeration	6.0

AutoCad Certificate of Completion

Required Courses: 8 units

Course Number	Title	Units
INDR B10	Introduction to Industrial Drawing and Graphics	1.0
INDR B11	Introduction to Computer Aided Drafting and Design (CAD)	1.0
INDR B20a	Computer Aided Drafting and Design (CAD)	3.0
INDR B20b	Computer Aided Drafting and Design (CAD)	3.0

Basic Automotive Maintenance and Service Certificate of Completion

Required Courses: 17 units

Course Number	Title	Units
AUTO B90	Automotive Maintenance and Repair	12.0
INDT B90	Occupational Readiness	5.0

Basic Machine Tool Operations-Lathe, Mill Certificate of Completion

Required Courses: 3 units

Course Number	Title	Units
APRD B1ab	Introduction to the Machine Tool Processes	3.0

Blueprint Reading and Layout for Welders Certificate of Completion

Required Courses: 6 units

Course Number	Title	Units
WELD B54a	Blueprint Reading and Layout for Welders	3.0
WELD B54b	Template Development and Layout for the Welder	3.0

Computer Numerical Control Programming Certificate of Completion

Required Courses: 6 units

Course Number	Title	Units
APRD B2	Introduction to Numerical Control and Fundamentals of Programming	3.0
APRD B3	Computer Numerical Control Milling Machine	3.0

Diesel and Farm Equipment Service and Repair Certificate of Completion

Required Courses: 17 units

Course Number	Title	Units
AUTO B80	Diesel & Heavy Equipment Technician Training	12.0
INDT B90	Occupational Readiness	5.0

Gas Metal Arc/Gas Tungsten Arc Welding/Flux Core Arc Welding

Required Courses: 7.5 or 17 units

Course Number	Title	Units
WELD B1ab	Introduction to the Welding Processes	3.0
WELD B53ab	Shielded Metal Arc Welding	3.0
WELD B74a	TIG Welding	1.5
OR		
WELD B90	General Welding	12.0
INDT B90	Occupational Readiness	5.0

OSHA First Responder Awareness Level Certificate of Completion

Required Course: 3 units

Course Number	Title	Units
ENVNT B1ab	Introduction to Environmental Technology	3.0

OSHA Hazardous Waste Operations & Emergency Response (HAZWOPER) 24 hour site Worker Certificate of Completion

Required Course: 1 unit

Course Number	Title	Units
ENVNT B10a	Hazardous Materials Awareness and Safety	1.0

OSHA HAZWOPER 40 Hour Site Worker Certificate of Completion

Required Courses: 4 units

Course Number	Title	Units
ENVT B10a	Hazardous Materials Awareness and Safety	1.0
ENVT B10b	Spill Control and Emergency Response	1.5
ENVT B10c	Decision Making in Emergencies	1.5

Programmable Logic Controllers (Basic PLC's) Certificate of Completion

Required Courses: 6 units

Course Number	Title	Units
APRD B5	Introduction to Programmable Logic Controllers (PLC)	3.0
APRD B61	Introduction to Process Control	3.0

Shielded Metal Arc Welding Certificate of Completion

Required Courses: 12 or 17

Course Number	Title	Units
WELD B1ab &	Introduction to the Welding Processes	3.0
WELD B53ab &	Structured Plate Certification	3.0
WELD B54a &	Blueprint Reading for Welders and Machinists	3.0
WELD B54b	Template Development and Layout for the Welder	3.0
or		
WELD B90 &	General Welding	12.0
INDT B90	Occupational Readiness	5.0

Woodworking/Cabinetmaking Certificate of Completion

Required Courses: 6 units from list below

Course Number	Title	Units
WOOD B1	Creative Woodworking	3.0
WOOD B2	Furniture and Cabinetmaking	3.0
WOOD B5	Intermediate Cabinetmaking	3.0

CERTIFICATES OF ACHIEVEMENT

These training programs are more comprehensive than Certificates of Completion and 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, Environmental Hazardous Materials Technology, Construction, Cabinetmaking, Electronics Technology, Automated Production and Manufacturing Processes, and

Welding. Each program consists of basic requirements and suggested electives. Electives should be selected in consultation with faculty advisors and counselors. All courses must be completed with a grade of "C" or higher.

Upon completion of the requirements, the student may apply to the division office for a Certificate of Achievement. Certificates are awarded upon recommendation by lead instructors and the department chairperson.

Note: All students pursuing a Degree or Certificate of Achievement must take an Educational Planning Course. INDT B10, Introduction to Industrial Technology, is recommended to fulfill this requirement.

Automated Production And Manufacturing Processes Certificate Program

Required Courses: 30 units

Course Number	Title	Units
APRD B1ab	Introduction to Machine Tool Processes	3.0
APRD B4	Introduction to Automated Production and Manufacturing Processes	3.0
APRD B5	Introduction to Programmable Electronic Controllers (PLC)	3.0
APRD B2	Introduction to Numerical Control and Fundamentals of Programming	3.0
APRD B3	Computer Numerical Control Milling Machine	3.0
INDR B10	Introduction to Industrial Drawing and Graphics	1.0
INDR B11	Introduction to Computer Aided Drafting and Design (CAD)	1.0
APRD B61	Introduction to Process Control	3.0
ELET B1	Fundamentals of Electronics (DC)	4.0
MATH BA	Elementary Algebra	3.0
INDT B10	Introduction to Industrial Technology	0.5

Electives: at least 2.5 units

Course Number	Title	Units
ENGL B1	Introductory Composition	4.0
WELD B54a	Blueprint Reading for Welders and Machinists	3.0
WELD B1ab	Introduction to the Welding Processes	3.0
INDR B20a	Computer Aided Drafting and Design	3.0
INDT B50	Managing Quality Organizations	3.0
INDT B249	Cooperative Work Experience Education	1.0
INDT B273	Special Problems in Machine Tool Metal Working	2-3.0



Auto Brakes and Wheel Alignment Certificate Program

This program develops student's knowledge and skills in automotive brake and suspension systems operation, troubleshooting, maintenance, repair, and wheel alignment procedures.

Required Courses: 24 units

Course Number	Title	Units
AUTO B8	Automotive Suspension, Steering and Alignment	6.0
AUTO B103	Automotive and Light Truck Brake Systems	4.0

AUTO B64a or AUTO B14	Automotive Electricity Automotive Tune-Up: Electrical and Ignitions (10.0)	2.0
MATH B50 or Math Placement	Modern College Arithmetic & Pre-algebra Assessment Level 2 or above	3.0
INDT B10 or Equivalent	Introduction to Industrial Technology	0.5

Electives: at least 0.5 or 8.5 units

Course Number	Title	Units
AUTO B66	Automotive Computer Controls	4.0
AUTO B2a or AUTO B75a & AUTO B75b	Automotive Engine Overhaul Introduction to Engine Overhaul (3.0) Engine Repair Techniques (3.0)	9.0
WELD B1ab	Introduction to the Welding Processes	3.0
WEXP B249	Cooperative Work Experience Education	1-4.0
INDT B275	Special Problems in Automotive	2-3.0



Auto Engine Overhaul Certificate Program

This program develops student's knowledge and skills in the areas of automotive and light truck engine overhaul and machining procedures. Program includes instruction in theory of operation, diagnostic, and repair procedures.

Required Courses: 24 units

For Day Students:

Course Number	Title	Units
AUTO B2a	Automotive Engine Overhaul	9.0
AUTO B2b	Automotive Engines Machining	9.0
MATH B50 or Math Placement	Modern College Arithmetic & Pre-Algebra Assessment Level 2 or above	3.0
INDT B10 or Equivalent	Introduction to Industrial Technology	0.5

For Night Students:

Course Number	Title	Units
AUTO B75a	Introduction to Engine Overhaul	3.0
AUTO B75b	Engine Repair Techniques	3.0
AUTO B75c	Advanced Engine Overhaul	3.0
AUTO B75d	Advanced Engine Machining	3.0
INDT B10 or Equivalent	Introduction to Industrial Technology	0.5
MATH B50 or Math Placement	Modern College Arithmetic & Pre-Algebra Assessment Level 2 or above	3.0

Electives: at least 2.5 units for day students and 8.5 units for night students.

Course Number	Title	Units
AUTO B14	Automotive Tune-Up: Electrical and Ignitions	10.0
AUTO B63	Automotive Fuel Injection and Diagnosis	2.0
AUTO B64a	Automotive Electricity	2.0
AUTO B65	Automotive Emission Control Devices	4.0
INDT B249	Cooperative Work Experience Education Special Problems in Automotives	4.0 2-3.0
WELD B1ab	Introduction to the Welding Processes	3.0



Automotive Power-Trains Certificate Program

This program develops student's knowledge and skills in the areas of automotive and light truck standard and automotive

transmissions, differential and drive train components. Program includes instruction in theory of operation, diagnostic and repair procedures as well as complete repair procedures.

Required Courses: 24 units

Course Number	Title	Units
AUTO B12a	Automatic Transmissions Overhaul and Service	8.0
AUTO B112b	Standard Transmissions and Power Train Service	4.0
AUTO B14 or AUTO B64a	Automotive Tune-Up: Electrical and Ignitions Automotive Electricity (2.0)	10.0
MATH B50 or Math Placement	Modern College Arithmetic & Pre-Algebra Assessment Level 2 or above	3.0
INDT B10 or Equivalent	Introduction to Industrial Technology	0.5

Electives: at least 6.5 units if taking AUTO B64a instead of AUTO B14

Course Number	Title	Units
AUTO B8	Automotive Suspension, Steering and Alignment	8.0
APRD B1ab	Introduction to Machine Tool Processes	3.0
AUTO B66	Automotive Computer Controls	4.0
AUTO B2a or AUTO B75a	Automotive Engine Overhaul Introduction to Engine Overhaul	9.0 3.0
WEXP B249	Cooperative Work Experience Education	1-4.0
INDT B275	Special Problems in Automotive	2-3.0



Auto Tune-Up and Emission Systems Certificate Program

This program develops student's knowledge and skills in the areas of automotive and light truck tune-up and emission control systems. Program includes instruction in theory of ignition, fuel, and computer control systems as well as emission test procedures and complete diagnostic and repair procedures.

Required Courses: 26 units

Course Number	Title	Units
AUTO B14	Automotive Tune-Up: Electrical and Ignitions	10.0
AUTO B15	Automotive Tune-Up: Fuel and Emissions	10.0
MATH B50 or Math Placement	Modern College Arithmetic & Pre-Algebra Assessment Level 2 or above	3.0
INDT B10 or Equivalent	Introduction to Industrial Technology	0.5

Electives: at least 2.5 units

Course Number	Title	Units
AUTO B59	Automotive Air Conditioning	2.0
AUTO B65	Automotive Emission Control Devices	4.0
AUTO B75a or AUTO B2a	Introduction to Engine Overhaul Automotive Engine Overhaul (9.0)	3.0
ELET B1	Fundamentals of Electronics (DC)	4.0
ENGL B1	Introductory Composition	4.0
COMS 50a	Introduction to the Microcomputer and MS DOS	1.0

WEXP B 249	Cooperative Work Experience Education	1-4.0
INDT B 275	Special Problems in Automotives	1-3.0

Cabinetmaking Certificate Program

Required Courses: 33 units

Course Number	Title	Units
WOOD B1	Beginning Hand Woodworking	3.0
WOOD B2	Furniture and Cabinetmaking	3.0
CNST B1	Introduction to Construction	3.0
CNST B4a &	Cabinetmaking and Millwork	4.0
CNST B4b or	Cabinetmaking and Millwork	4.0
WOOD B5 &	Intermediate Cabinetmaking (3.0)	
WOOD B65a &	Advanced Cabinetmaking (3.0)	
WOOD B65b	Advanced Cabinetmaking (3.0)	
ENGL	Approved Course	4.0
MATH B50 or	Modern College Arithmetic & Pre-Algebra	3.0
Math Placement	Assessment Level 2 or Above	
INDR B10	Introduction to Industrial Drawing and Graphics	1.0
INDT B10	Introduction to Industrial Technology or equivalent	0.5

Electives: at least 6.5 or 7.5 units

Course Number	Title	Units
INDT B249	Cooperative Work Experience Education	1-4.0
INDT B274	Special Problems in Woodworking	2-3.0
INDR B11	Introduction to Computer Aided Drafting and Design (CAD)	1.0
INDR B20a	Computer Aided Drafting and Design (CAD)	3.0
FORE B2	Natural Resources	3.0
ENGL B1	Introductory Composition	4.0

Construction Technology Certificate Program

Required Courses: 30 units

Course Number	Title	Units
CNST B1	Introduction to Construction	3.0
CNST B2	Blueprint Reading and Estimating	3.0
WOOD B2	Furniture and Cabinetmaking	3.0
CNST B4a or	Cabinetmaking and Millwork	4.0
WOOD B5	Intermediate Cabinetmaking (3.0)	
INDT B249	Cooperative Work Experience Education	4.0
INDR B11	Introduction to Computer Aided Drafting and Design (CAD)	1.0
INDR B10	Introduction to Industrial Drawing and Graphics	1.0
ARCH B55	Building Codes	3.0
MATH B50 or	Modern College Arithmetic & Pre-Algebra	3.0
Math Placement	Assessment Level 2 or above	
INDT B10	Introduction to Industrial Technology or equivalent	0.5

Electives: at least 4.5 to 5.5 units

Course Number	Title	Units
INDR B20a	Computer Aided Drafting and Design (CAD)	3.0
ARCH B33	Architectural Computer Practice	3.0

Note: Students should consult with their counselors for best possible selections for their programs of study.

Electronics Technology Certificate Program

Required Courses: 31.5 units

Course Number	Title	Units
ELET B1	Fundamentals of Electronics (DC)	4.0
ELET B2	Fundamentals of Electronics (AC)	4.0
ELET B9	Semiconductor Circuit Analysis	4.0
ELET B12	Digital Logic	4.0
ELET B55	Electric Motors-Controls	4.0
ELET B62	Electronic Communication Systems & Circuits	4.0
MATH BA or	Elementary Algebra	3.0
Equivalent		
COMS B50a	Introduction to Microcomputer and MS DOS	1.0
APRD B5	Introduction to Programmable Electronic Controllers (PEC)	3.0
INDT B10	Introduction to Industrial Technology or equivalent	0.5

Environmental Technology Certificate

Environmental Technology refers to the knowledge and skills that enable a person to work with hazardous materials safely and in compliance with governmental regulations in order to protect human health and the environment.

Required Courses: 36 units

Course Number	Title	Units
ENVT B49 or	Applied Chemistry	4.0
CHEM B49	Applied Chemistry	
ENVT B1ab	Introduction to Environmental Technology	3.0
ENVT B10a	Hazardous Materials Awareness and Safety	1.0
ENVT B10b	Spill Control and Emergency Response	1.5
ENVT B10c	Decision Making in Emergencies	1.5
ENVT B20	Hazardous Waste Generation, Reduction, and Treatment	3.0
ENVT B30	Health Effects of Hazardous Materials	3.0
ENVT B15a	Right-to-Know Laws	1.5
ENVT B15b	Transportation and Storage of Hazardous Materials	1.5
ENVT B15c	Air Quality Issues	1.0
ENVT B40a	Generator Requirements	1.5
ENVT B40b	Sampling and Analysis	1.5
ENVT B40c	Special Topics in Hazardous Waste Management	1.0
BIOL B18	Essentials of Anatomy and Physiology	4.0
BIOL B7	Environment	3.0

Electives: at least 4 units

Course Number	Title	Units
SPCH B1	Speech Communication	3.0
COMS B5	Introduction to Microcomputer Applications	3.0
MGMT B65a	Basic Principles of English for Business/Public Organization	1.0
MGMT B65b	Principles of Writing for Business/Public Organization	1.0
MGMT B65c	Organizational Communications	1.0

Welding Certificate Program

Required Courses: 26 units

Course Number	Title	Units
WELD B1ab	Introduction to the Welding Processes	3.0
WELD B53ab	Shielded Metal Arc Welding	3.0

WELD B55ab	Structural Plate Certification	3.0
WELD B55cd	ASME Pipe Certification	3.0
WELD B74ab	TIG and MIG Welding	3.0
APRD B1a	Introduction to Machine Tool Processes	1.5
WELD B54a	Blueprint Reading for Welders & Machinists	3.0
MATH B50 or Math Placement Assessment Level 2 or above	Modern College Arithmetic & Pre-Algebra	3.0
INDT B10	Introduction to Industrial Technology or equivalent	0.5

Electives: at least 3 units

Course Number	Title	Units
ENGL	Approved Course	4.0
INDR B10	Introduction to Industrial Drawing and Graphics	1.0
INDT B271	Special Problems in Welding	2-3.0
ELET B1	Fundamentals of Electronics (DC)	4.0
WELD B55ef	API and Related Certification Testing	3.0
WELD B54b	Template Development and Layout for the Welder	3.0
ENVT B10a	Hazardous Materials Awareness and Safety	1.0
APRD B4	Introduction to Automated Production and Manufacturing Processes	1.5
INDR B11	Introduction to Computer Aided Drafting and Design	1.0
INDT B249	Cooperative Work Experience Education	1.0

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. INDT B10, Introduction to Industrial Technology, is strongly recommended for all Industrial Technology majors. It will satisfy the educational planning requirement for graduation. Counselors/ advisors will assist the student in planning for an Associate Degree.

ASSOCIATE IN ARTS DEGREE PROGRAMS

Industrial Drawing

Required Courses: 18 units

Course Number	Title	Units
INDR B10	Introduction to Industrial Drawing and Graphics	1.0
INDR B11	Introduction to Computer Aided Drafting and Design (CAD)	1.0
INDR B20a	Computer Aided Drafting and Design (CAD)	3.0
INDR B50	Process Piping	3.0
INDR B51	Electrical Design	3.0
INDR B52	Geographic Information Systems (GIS)	3.0

Electives: at least 4 units

Course Number	Title	Units
INDR B16	Introduction to 3D Animation	1.0
INDR B20b	Computer Aided Drafting and Design (CAD)	3.0
INDR B30b	Industrial Drawing	3.0

ASSOCIATE IN SCIENCE DEGREE PROGRAMS

Environmental Technology

Environmental Technology refers to the knowledge and skills that enable a person to work with hazardous materials safely and in compliance with governmental regulations in order to protect human health and the environment.

Required Courses: 36 units

Course Number	Title	Units
ENVT B49 or CHEM B49	Applied Chemistry	4.0
ENVT B1ab	Introduction to Environmental Technology	3.0
ENVT B10a	Hazardous Materials Awareness and Safety	1.0
ENVT B10b	Spill Control and Emergency Response	1.5
ENVT B10c	Decision Making in Emergencies	1.5
ENVT B20	Hazardous Waste Generation, Reduction, and Treatment	3.0
ENVT B30	Health Effects of Hazardous Materials	3.0
ENVT B15a	Right-to-Know Laws	1.5
ENVT B15b	Transportation and Storage of Hazardous Materials	1.5
ENVT B15c	Air Quality Issues	1.0
ENVT B40a	Generator Requirements	1.5
ENVT B40b	Sampling and Analysis	1.5
ENVT B40c	Special Topics in Hazardous Waste Management	1.0
BIOL B18	Essentials of Anatomy and Physiology	4.0
BIOL B7	Environment	3.0

Electives: at least 4 units

Course Number	Title	Units
COMS B5	Introduction to Microcomputer Applications	3.0
MGMT B65a	Basic Principles of English for Business/ Public Organization	1.0
MGMT B65b	Principles of Writing for Business/ Public Organization	1.0
MGMT B65c	Organizational Communications	1.0

Industrial Technology (General)

Required Courses: 30 units

Course Number	Title	Units
APRD B1ab	Introduction to Machine Tool Processes	3.0
APRD B4	Introduction to Automated Production and Manufacturing Processes	1.5
APRD B5	Introduction to Programmable Logic Controllers (PLC)	3.0
ELET B1	Fundamentals of Electronics (DC)	4.0
INDR B10	Introduction to Industrial Drawing and Graphics	1.0
INDR B11	Introduction to Computer Aided Drafting and Design (CAD)	1.0
INDR B20a	Computer Aided Drafting and Design (CAD)	3.0
ENVT B1ab	Introduction to Environmental Technology	3.0
WELD B1ab	Introduction to the Welding Processes	3.0
COMS B12	Introduction to Programming with BASIC	3.0

Electives: at least 4.5 units

Course Number	Title	Units
INDR B20b	Computer Aided Drafting and Design (CAD)	3.0

APRD B2	Introduction to Numerical Control and Fundamentals of Programming	3.0
WOOD B2	Furniture and Cabinetmaking	3.0
ENVT B10a	Hazardous Materials Awareness and Safety	1.0
AUTO B1	Basic Auto	3.0
CNST B1	Introduction to Construction	3.0
COMS B5	Introduction to Microcomputer Applications	3.0
MGMT B43 or BSAD B20	Principles of Organization and Management	3.0
STDV B51	Introduction to Business	1.0
INDT B50	Job Search Strategies	1.0
	Managing Quality Organizations	3.0

Industrial Technology Automated Production And Manufacturing Processes Option

Required Courses: 30 units

Course Number	Title	Units
APRD B1ab	Introduction to Machine Tool Processes	3.0
APRD B4	Introduction to Automated Production and Manufacturing Processes	3.0
APRD B5	Introduction to Programmable Logic Controllers (PLC)	3.0
APRD B2	Introduction to Numerical Control and Fundamentals of Programming	3.0
APRD B3	Computer Numerical Control Milling Machine	3.0
INDR B10	Introduction to Industrial Drawing and Graphics	1.0
INDR B11	Introduction to Computer Aided Drafting and Design (CAD)	1.0
WELD B54a	Blueprint Reading for Welders & Machinists	3.0
APRD B61	Introduction to Process Control	3.0
ELET B1	Fundamentals of Electronics (DC)	4.0
INDT B10	Introduction to Industrial Technology or equivalent	0.5

Electives: at least 3 units

Course Number	Title	Units
WELD B53ab	Shielded Metal Arc Welding	3.0
INDR B20a	Computer Aided Drafting and Design (CAD)	3.0
INDT B50	Managing Quality Organizations	3.0
WEXP B249ab	Cooperative Work Experience Education	1.0
INDT B273	Special Problems in Tool Metal Working	2-3.0

Industrial Technology Automotive Option

Required Courses: 32 units

Select From:

Course Number	Title	Units
AUTO B2a	Automotive Engine Overhaul	9.0
AUTO B2b	Automotive Engines Machining	9.0
AUTO B103	Automotive and Light Truck Brake Systems	4.0
AUTO B8	Automotive Suspension, Steering and Alignment	8.0
AUTO B12a	Automatic Transmissions Overhaul and Service	8.0
AUTO B112b	Standard Transmissions and Power Train Service	4.0
AUTO B14	Automotive Tune-Up: Electrical and Ignitions	10.0
AUTO B15	Automotive Tune-Up: Fuel and Emissions	10.0
ELET B1	Fundamentals of Electronics (DC)	4.0

Industrial Technology Construction Option

Required Courses: 30 units

Course Number	Title	Units
CNST B1	Introduction to Construction	3.0
CNST B2	Blueprint Reading and Estimating	3.0
CNST B4a or WOOD B5	Cabinetmaking and Millwork	4.0
CNST B55a or WEXP B249	Intermediate Cabinetmaking (3.0) Residential Construction	5.0
INDR B10	Residential Construction (5.0) Cooperative Work Experience Education (4.0) Introduction to Industrial Drawing and Graphics	1.0
ARCH B55	Building Codes	3.0
WOOD B2	Furniture and Cabinetmaking	3.0
INDT B10	Introduction to Industrial Technology or equivalent	0.5

Electives: at least 7.5 units

Course Number	Title	Units
INDR B11	Introduction to Computer Aided Drafting and Design (CAD)	1.0
INDR B20a	Computer Aided Drafting and Design (CAD)	3.0
ARCH B56	Building and Related Codes	3.0

Industrial Technology Electronics Option

Required Courses: 30 units

Course Number	Title	Units
ELET B1	Fundamentals of Electronics (DC)	4.0
ELET B2	Fundamentals of Electronics (AC)	4.0
ELET B9	Semiconductor Circuit Analysis	4.0
ELET B12	Digital Logic	4.0
ELET B62	Electronic Communication Systems & Circuits	4.0
ELET B55	Electric Motors – Controls	4.0
APRD B5	Introduction to Programmable Logic Controllers (PLC)	3.0

Electives: at least 3 units

Course Number	Title	Units
INDR B11	Introduction to Computer Aided Drafting and Design (CAD)	1.0
MATH BC	Plane Trigonometry	3.0
APRD B4	Introduction to Automated Production and Manufacturing Processes	3.0

Industrial Technology Industrial Drawing Option

Required Courses: 30 units

Course Number	Title	Units
INDR B10	Introduction to Industrial Drawing and Graphics	1.0
INDR B11	Introduction to Computer Aided Drafting and Design (CAD)	1.0
INDR B20a	Computer Aided Drafting and Design (CAD)	3.0
INDR B20b	Computer Aided Drafting and Design (CAD)	3.0
INDR B30b	Industrial Drawing	3.0
INDR B50	Process Piping Drafting	4.0
MATH BC	Plane Trigonometry	3.0
INDR B51	Electrical Design	3.0

INDR B52	Geographic Information Systems (GIS)	3.0
APRD B1ab or WOOD B2	Introduction to Machine Tool Processes Furniture and Cabinetmaking	3.0
COMS B5	Introduction to Microcomputer Applications	3.0

Electives:

Course Number	Title	Units
ENGR B24	Engineering Graphics and Descriptive Geometry	2.0
WELD B1ab	Introduction to the Welding Processes	3.0
APRD B4	Introduction to Automated Production and Manufacturing Processes	3.0

**Suggested Program for Industrial Technology Industrial
Drawing Option**

First Semester

Course Number	Title	Units
INDR B10	Introduction to Industrial Drawing and Graphics	1.0
INDR B11	Introduction to Computer Aided Drafting and Design (CAD)	1.0
MATH BD	Intermediate Algebra	4.0

Second Semester

Course Number	Title	Units
INDR B30b	Industrial Drawing	3.0
INDR B20a	Computer Aided Drafting and Design (CAD)	3.0
MATH BC	Plane Trigonometry	3.0
INDR B50 or INDR B52	Process Piping Drafting Geographic Information Systems (GIS)	4.0 3.0

Third Semester

Course Number	Title	Units
INDR B50 or INDR B52	Process Piping Drafting Geographic Information Systems (GIS)	4.0 3.0
INDR B51	Electrical Design	3.0

Fourth Semester

Course Number	Title	Units
COMS B5	Introduction to Microcomputer Applications General Education	3.0

Industrial Technology Welding Option

Required Courses: 31-33 units

Course Number	Title	Units
WELD B1ab	Introduction to the Welding Processes	3.0
WELD B53ab	Shielded Metal Arc Welding	3.0
WELD B55ab	Structural Plate Certification	3.0
WELD B55cd	ASME Pipe Certification	3.0
WELD B74ab	TIG and MIG Welding	3.0
WELD B54a	Blueprint Reading for Welders & Machinists	3.0
APRD B1ab	Introduction to Machine Tool Processes	3.0
INDR B10	Introduction to Industrial Drawing and Graphics	1.0
INDR B11	Introduction to Computer Aided Drafting and Design (CAD)	1.0
APRD B4	Introduction to Automated Production and Manufacturing Processes	3.0
ENVT B1ab	Introduction to Environmental Technology	3.0

ENVT B10a	Hazardous Materials Awareness and Safety	1.0
INDT B271	Special Problems in Welding	2-3.0

**Industrial Technology Woodworking and
Cabinetmaking Option**

Required Courses: 30 units

Course Number	Title	Units
WOOD B1	Creative Woodworking	3.0
WOOD B2	Furniture and Cabinetmaking	3.0
WOOD B5	Intermediate Cabinetmaking	3.0
WOOD B65a	Advanced Cabinetmaking	3.0
WOOD B65b	Advanced Cabinetmaking	3.0
FORE B1	Introduction to Forestry	3.0
INDR B11	Introduction to Computer Aided Drafting and Design (CAD)	1.0
INDR B20a	Computer Aided Drafting and Design (CAD)	3.0
INDR B10	Introduction to Industrial Drawing and Graphics	1.0
CNST B1	Introduction to Construction	3.0

Electives: at least 4 units

Course Number	Title	Units
FORE B2	Natural Resources	3.0
INDR B30b	Industrial Drawing	3.0
APRD B1ab	Introduction to Machine Tool Processes	3.0

ENGINEERING TECHNOLOGY

Cal Poly Pomona; California State University, Sacramento; Cogswell College; Northrop University

Engineering technologists and engineering technicians are members of a technical team that also includes scientists, engineers and craftsmen. The members of the technical team perform job functions that are complementary and sometimes overlapping. By virtue of their education, training and interests, engineering technologists and engineering technicians are usually differentiated as follows:

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.

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. A beginning engineering technology student should have completed high school mathematics through intermediate algebra or MATH BD at Bakersfield College, one year of high school drafting, and be eligible for ENGL B1.

The following courses are required to satisfy the engineering technology core and Associate in Science program:

Required Courses: 35 units

Course Number	Title	Units
ENGR B48	Engineering Orientation	1.0
ENGR B45	Properties of Materials	3.0
ENGR B24	Engineering Graphics and Descriptive Geometry	2.0
INDR B10	Introduction to Industrial Drawing & Graphics	1.0
INDR B11	Introduction to Computer Aided Drafting and Design (CAD)	1.0
*CHEM B2a	Introductory General Chemistry	5.0
*PHYS B2a	General Physics-Mechanics and Heat	4.0
PHYS B2b	General Physics-Sound, Light, Electricity, Magnetism, Modern Physics	4.0
*MATH B6a	Analytic Geometry and Calculus	4.0
ENGR B19f or	Computer Programming for Science, Engineering and Technology (Fortran)	3.0
ENGR B19c	Computer Programming for Science, Engineering and Technology (C)	

*May be used to also fulfill general education requirements

In addition, seven 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.

- Electronics/Electrical Technology
- Construction Technology
- Manufacturing Processes Technology
- Welding/Fabrication
- Industrial Drawing and Graphics

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 eight 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 and may contact the BC Apprenticeship Coordinator at 395-4408 for further information.

- Bricklayers/Tilesetters
- Carpentry
- Electricians
- Operating Engineers
- Plumbers and Steamfitters
- Sheet Metal

ASSOCIATE DEGREE PROGRAM

	Units
Apprenticeship classes for duration of apprentice period (45 units maximum)	12-45
Work Experience (four semesters, maximum of 16 units)	4-16
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 PROGRAMS

	Units
Apprenticeship classes for duration of apprentice period	12-45
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 (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for

additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

AIR CONDITIONING AND REFRIGERATION ACRF B54a-B54b 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:** ACRF B54b; ACRF B54a. **Recommended:** ACRF B54a; Math BA or equivalent (may be taken concurrently), ELET B1. **Hours:** (108-108) 1 lect, 5 lab. **Offered:** B54a F; B54b S. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

AUTOMATED PRODUCTION AND MANUFACTURING PROCESSES TECHNOLOGY

Credit limitations may apply. For specific information see a counselor or the transfer institution.

APRD B1a Introduction to Machine Tool Processes (1.5 units)

Basic machine tool technology, including the use of precision measuring instruments, drilling machines, and lathes. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 1 lect/demo; 2 lab. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

APRD B1b Introduction to Machine Tool Processes (1.5 units)

Basic machine tool technology emphasizing the use of lathes and vertical milling machines. **Prerequisite:** APRD B1a. **Hours:** (54) 1 lect; 2 lab. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

APRD B2 Introduction to Numerical Control and Fundamentals of Programming (3 units)

Set-up, operation, and programming of a computer numerical control lathe. **Recommended:** Reading Level 5 or 6. Concurrent enrollment in APRD B1a or evaluation by instructor. **Hours:** (72) 3 lect, 1 lab by arrangement. **Offered:** F. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only.

APRD B3 Computer Numerical Control Milling Machine (3 units)

Set-up, operation, and programming of a computer numerical control (CNC) 3-axis milling machine including conversational and EIA programming. **Recommended:** Reading Level 5 or 6. Concurrent enrollment in APRD B1a or evaluation by instructor. **Hours:** (72) 3 lect, 1 lab by arrangement. **Offered:** S. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only.

APRD B4 Introduction to Automated Production and Manufacturing Processes (3 units)

Introduction to fundamental concepts of computer integrated manufacturing including computer numerical control machine tools (CNC), computer aided drafting and design (CAD), computer aided manufacturing (CAM), programmable logic control (PLC), servo/non-servo robots, vision inspection, pneumatics, operation of the Bakersfield College CIM cell. **Recommended:** Reading Level 5 or 6. **Hours:** (72) 3 lect, 1 lab. **Offered:** F, S. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only.

APRD B5 Introduction to Programmable Logic Control- lers (PLC) (3 units)

The function and application of programmable electronic controllers (PEC). Theory on the development and dynamics of the programmable electronic controller. Programming with ladder logic using a teach pendant and personal computer to perform tasks with a Mercury robot and training simulator. **Recommended:** Reading Level 5 or 6. **Hours:** (72) 3 lect, 1 lab. **Offered:** F, S. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective Credit only..

APRD B61 Introduction to Process Control (3 units)

Introduction to the function and application of the Allen Bradley SLC-500 series of programmable controllers. Programming with Rockwell Software's RSLogix-500 software. Control of discrete and analog I/O by a closed loop Proportional Integral Derivative (PID) controller as well as a remote PLC controller. **Prerequisite:** APRD B5 or evaluation by instructor of student's PLC programming skills. **Hours:** (72) 3 lect, 1 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

AUTO

Credit limitations may apply. For specific information see a counselor or the transfer institution.



AUTO B1 Introduction to Automotive Technology (4 units)

Introduction to the operation and maintenance of the modern automobile with emphasis on the theory of the basic operating systems. These systems include a) the engine and its systems (lubrication, cooling, fuel, and emission controls), b) electrical systems (battery, starting, charging, lighting, and ignition, c) the chassis (suspension, wheel alignment, steering, brakes, tires and wheels, d) the drive line (clutch, standard and automatic transmissions, universal joints and differential). **Recommended:** Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

**AUTO B2a Automotive Engine Overhaul (9 units)**

Preparation for ASE A1 exam. Theory of internal combustion, piston-type engine design and maintenance. Practice in engine overhaul procedures and mechanical problem diagnosis. **Recommended:** AUTO B1 with minimum grade of “C” or evaluation of previous auto experience by instructor. **Hours:** (270) 6 lect, 9 lab. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Elective credit only.

**AUTO B2b Automotive Engines Machining (9 units)**

Prepares for ASE M1G, M2g, M3g exams. Advanced engine design, theory of machining techniques and engine machining procedures. Practice in automotive machining operations. **Prerequisite:** AUTO B2a. **Hours:** (270) 6 lect, 9 lab. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Elective credit only..

**AUTO B8 Automotive Suspension, Steering and Alignment (8 units)**

Prepares for AES A4 exam. Principles of design and operation, techniques for repair and replacement of 4-wheel suspension components. Alignment procedures using modern computerized 4-wheel alignment equipment. **Recommended:** Reading Level 5 or 6. **Hours:** (216) 6 lect, 6 lab. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Elective credit only.

**AUTO B12a Automatic Transmissions Overhaul and Service (8 units)**

Prepares for ASE A5 exam. Automatic transmissions and transaxles, computer controls, two-, three-, and four-speed transmissions, overdrive, and all related components. Successful completion should enable the student to pass the National Institute of Service Excellence test. **Recommended:** Reading Level 5 or 6. **Hours:** (216) 6 lect, 6 lab. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Elective credit only.

**AUTO B14 Automotive Tune-Up: Electrical and Ignitions (10 units)**

Prepares for ASE A6, A8 exams. Fundamentals of automotive electrical/electronic component repair. Includes electrical theory, diagnosis and repair of battery, starting, charging and ignition systems including computer controlled systems. Laboratory emphasis on computer diagnostic equipment. **Recommended:** AUTO B1 or one year automotive repair work experience. Reading Level 5 or 6. **Hours:** (270) 8 lect, 7 lab. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Elective credit only.

**AUTO B15 Automotive Tune-Up: Fuel and Emissions (10 units)**

Prepares for ASE A8 exam. Theory, operation, and servicing of automotive fuel systems, computer controlled fuel systems, emission controls, and advanced engine performance.

Recommended: AUTO B1 with a grade of “C” or evaluation by instructor of previous auto experience. **Hours:** (270) 8 lect, 7 lab. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Elective credit only.

AUTO B56ab Diesel Engines and Systems Basics (2-2 units)

Diesel technology used in agriculture and transportation industries, covers principles of operation, diagnosis and service. **Recommended:** Reading Level 5 or 6. **Hours:** (36-36) 2 lect, 2 lab for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

**AUTO B59 Automotive Air Conditioning (2 units)**

Prepares for ASE A7 exam. Safety, principles and theory of automotive air conditioning systems, laboratory practice in the installation, service and repair of automotive air conditioning components. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 2 lect, 1 lab. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**AUTO B62 Automatic Transmissions (2 units)**

Prepares for ASE A2 exam. Entry-level program providing technical instruction in diagnosis and repairs of automatic transmissions. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 1.5 lect, 1.5 lab. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

AUTO B63 Automotive Fuel Injection and Diagnosis (2 units)

Introduction to overhaul and service of fuel injection and carburetor systems including fuel tank, lines and pumps. **Recommended:** AUTO B1 or evaluation by instructor of automotive experience. Reading Level 5 or 6. **Hours:** (54) 1.5 lect, 1.5 lab. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**AUTO B64a Automotive Electricity (2 units)**

Prepares for ASE A6 exam. Fundamentals of automotive electronics and electrical components including ignitions, computers, batteries, alternators, starters. Laboratory emphasis on testing and servicing of electrical equipment. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 1.5 lect, 1.5 lab. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

AUTO B64b Advanced Automotive Electronics (2 units)

Course is directed toward the student already possessing a basic electrical knowledge. Lab will emphasize troubleshooting current auto electronic systems, utilizing the digital multimeter, lab oscilloscope and logic probe. Student will learn electronic components, analog/digital circuit theory and testing. **Prerequisite:** AUTO B64a or AUTO B66 or two years experience in the automotive service field. **Hours:** (54) 1.5 lect, 1.5 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

AUTO B65 Automotive Emission Control Devices (4 units)

Prepares for state smog license. Installation, operation, and repair of automotive pollution control devices including crankcase devices, exhaust emissions, and vapor control systems. Meets the California Air Resources (C.A.R.B.) pre-examination requirements. **Recommended:** AUTO B1 or one year automotive repair work experience. **Hours:** (108) 3 lect, 3 lab. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.



AUTO B66 Automotive Computer Controls (4 units)

Prepares for ASE L1 exam. Operation and diagnosis of domestic and import 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. **Recommended:** AUTO B1 or one year automotive experience. **Hours:** (108) 3 lect, 3 lab. **Offered:** F, S. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

AUTO B67abc Motor Sports Dynamics/Technical Preparation (1-1-1 units)

Explore operation and diagnosis of race car suspension and engine performance. Explore the various methods of race team management and organization. **Recommended:** Reading Level 5 or 6. **Hours:** (18-18-18) 3 lect for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

AUTO B68 Race Car Construction and Engineering (2 units)

Class will engineer race car systems, fabricate and assemble race car using skills and theories taught in AUTO B67abc, test tuning and suspension theories at local race track using professional driver for consistency. **Prerequisite:** AUTO B67abc. **Hours:** (54) 1 lect, 2 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.



AUTO B73 Wheel Alignment (2 units)

Prepares for ASE A4 exam. 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. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 1.5 lect, 1.5 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.



AUTO B74 Automotive Disc and Drum Brake Service (2 units)

Prepares for ASE A5 exam. Principles of operation and diagnosis, repair, and replacement of automotive brake system components. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 1.5 lect, 1.5 lab. **Offered:** F. **Repeat:** 1. **CCS:**

Occupational Education. **Not Transferable:** Associate Degree only.



AUTO B75a Introduction to Engine Overhaul (3 units)

Prepares for ASE A1 exam. Theory of internal combustion, piston-type engine design and maintenance. Engine disassembly for familiarization purposes. **Recommended:** AUTO B1 or high school automotive class, or one year automotive repair work experience. **Hours:** (108) 2 lect, 4 lab. **Offered:** F. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.



AUTO B75b Engine Repair Techniques (3 units)

Prepares for ASE A1 exam. Theory of internal combustion, piston-type engine repair techniques. Practice in overhaul procedures, mechanical problem diagnosis and measuring techniques. **Prerequisite:** AUTO B75a. **Hours:** (108) 2 lect, 4 lab. **Offered:** F. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.



AUTO B75c Advanced Engine Overhaul (3 units)

Prepares for ASE A1 exam. Application of engine overhaul theory and procedures, component tolerancing, reassembly and break-in procedures. **Prerequisite:** AUTO B75b. **Hours:** (108) 2 lect, 4 lab. **Offered:** F. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.



AUTO B75d Advanced Engine Machining (3 units)

Prepares for ASE A1 exam. Advanced engine design, theory of machining techniques and engine machining procedures. Practice in automotive machining. **Prerequisite:** AUTO B75c. **Hours:** (108) 2 lect, 4 lab. **Offered:** F. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

AUTO B76 Performance Engine Building (2 units)

Theory of high performance engines and machining skills necessary to modify stock production engines for maximum output. Test sessions at local racetrack will show applied theory and skills. **Prerequisite:** AUTO B2a and AUTO B2b or AUTO B75abcd. **Hours:** (54) 1 lect, 2 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

AUTO B80 Diesel and Heavy Equipment Technician Training (12 units)

Repair service on on heavy equipment. Designed for students enrolled through the Employers Training Resource Program (ETR) and emphasizes maintenance, repair, trouble-shooting, design, safety, tool usage, equipment operation, machine tool usage, welding and air conditioning. **Prerequisites:** Concurrent enrollment in INDT B90. **Hours:** (450) 5 lect, 20 lab for 18 weeks. Open entry/open exit. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

AUTO B90 Automotive Maintenance and Repair (12 units)

Engine components, chassis, brake, air conditioning service and basic engine tune-up. **Prerequisite:** Concurrent enrollment in INDT B90. **Hours:** (450) 5 lect, 20 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.



AUTO B103 Automotive and Light Truck Brake Systems (4 units)

Prepares for ASE A5 exam. A comprehensive course in automotive and light truck brake systems, designed to give the student the skills and technical knowledge to diagnose, repair or replace all the brake components on late model vehicles. **Recommended:** Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.



AUTO B112b Standard Transmissions and Power Train Service (4 units)

Prepares for ASE A3 exam. Standard transmissions and transaxles, clutches, "U" joints, differentials and all related components. Successful completion should enable the student to pass the National Institute of Service Excellence test. **Recommended:** Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CONSTRUCTION TECHNOLOGY

Credit limitations may apply. For specific information see a counselor or the transfer institution.

CNST B1 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. **Recommended:** Reading Level 5 or 6 or evaluation by instructor. **Hours:** (54) 3 lect. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

CNST B2 Estimating and Scheduling (3 units)

Techniques in estimating and scheduling for the building industry. Plan reading and the extraction of the information necessary to calculate quantities and costs are covered. The preparation of a cost breakdown for the use of a financial institution and a production schedule for the projects is completed in the class. The use of computer programs to calculate the cost and keep track of the scheduling is explored and practiced. Practice and theory are pursued. **Recommended:** CNST B1 or one year work experience in the construction related industry. **Hours:** (54) 3 lect. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

CNST B3a Plumbing for Residential Construction (1.5 units)

The study and discussion of local building codes, along with developing the basic skills of beginning students in the knowledge of plumbing materials, tools and equipment together with the basic technical knowledge required to enter the plumbing industry. Emphasis is on how to make all the common joints, and install the systems common to the plumbing trade as well as how to install finished fixtures and appliances. **Prerequisites:** CNST B1, CNST B2, or evaluation by instructor. **Hours:** (27) 3 lect for 9 weeks. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CNST B3b Electrical for Residential Construction (1.5 units)

The study and discussion of local building codes as related to residential electrical wiring, along with developing the basic skills of beginning students in the knowledge of electrical wiring materials, tools, and equipment together with the basic technical knowledge required to enter the electrical wiring industry. The student will learn the basic theory of electricity, and how to install the system most commonly used in the residential electrical trade and how to install finish electrical fixtures and appliances. **Prerequisites:** CNST B1, CNST B2 or evaluation by instructor. **Hours:** (27) 3 lect for 9 weeks. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CNST B4a Cabinetmaking and Millwork (4 units)

A highly structured, intermediate level course in cabinetmaking and millwork designed to prepare students for employment in the cabinet/construction industry. Special attention to state-of-the-art techniques. **Prerequisites:** WOOD B2 or equivalent or evaluation by instructor. **Recommended:** Prior experience. **Hours:** (144) 3 lect, 5 lab. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CNST B4b Cabinetmaking and Millwork (4 units)

An advanced course in cabinetmaking, utilizing machine and hand techniques necessary for top- end construction. Residential and non-residential type cabinets and the economical use of solid lumber; architectural millwork such as frame and panel wainscot, built-in furniture, desks, bars, doors, and windows; commercial applications such as store fixtures, counters, and reception desks; computer-aided cabinet design. **Prerequisites:** CNST B4a or evaluation by instructor. **Hours:** (144) 3 lect, 5 lab. Field trips required. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CNST B55a-B55b Residential Construction (5-5 units)

The use of different trades in the actual construction of various projects. The theory will be discussed and then applied to the project. All trades necessary to the completion of a residential structure will be experienced. The trades

involved will include, but not be limited to, concrete, framing, plumbing, electrical, interior and exterior finish, insulation, and roofing. Alternative materials and methods will be used to complete the projects. The student can enroll mid-year and take the semesters out of sequence. **Prerequisites:** CNST B 1, CNST B2. **Hours:** (180-180) 3 lect, 7 lab. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

ELECTRICAL TECHNOLOGY

Credit limitations may apply. For specific information see a counselor or the transfer institution.

ELET B1 Fundamentals of Electronics (DC) (4 units)

Introduction to electricity including electrostatics, direct current circuits, resistive alternating current circuits, electrical circuit calculations, electrical measurements, and use of test equipment. **Recommended:** Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ELET B2 Fundamentals of Electronics (AC) (4 units)

Direct and alternating current circuit analysis using network theorems in resistive and reactive circuits. Includes study of resonance, power factor correction, and passive filters.

Prerequisite: ELET B1 with a grade of "C" or equivalent background in electricity/electronics. **Hours:** (108) 3 lect, 3 lab. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ELET B9 Semiconductor Circuit Analysis (4 units)

Characteristics and applications of semiconductor electronic devices including operational amplifiers and other linear integrated circuits in analog circuits including power supplies, amplifiers, oscillators, and active filters. **Prerequisite:** ELET B2 with a grade of "C." **Recommended:** ELET B1. **Hours:** (108) 3 lect, 3 lab. **Offered:** S. **Repeat:** 2. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ELET B12 Digital Logic (4 units)

Number systems, boolean logic, and fundamentals of digital devices; basic applications of logic devices in computers and control systems. Course includes an introduction to microprocessors and their applications. **Hours:** (108) 3 lect, 3 lab. **Offered:** F. **Repeat:** 2. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ELET B55 Electric Motors - Controls (4 units)

Basic principles of design and construction, operating characteristics, efficiency and application of direct current and alternating current machines. Emphasis is placed on programmable, solid state, and electromechanical motor controllers. **Prerequisite:** ELET B1. **Recommended:** Reading level 5 or 6. **Hours:** (108) 3 lect, 3 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

ELET B56 Introduction to Industrial Measurement and Control (1.5 units)

Basic principles of process measurement and control.

Recommended: Reading Level 5 or 6. **Hours:** (27) 3 lect for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

ELET B62 Electronic Communication Systems & Circuits (4 units)

Introduction to the basic circuits and communications systems used in modern electronic communications. **Prerequisite:** ELET B9 with a grade of "C" or better (may be taken concurrently). **Hours:** (108) 3 lect, 3 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Formerly parts of ELET B66ab.

ENVIRONMENTAL TECHNOLOGY

ENVT B1ab Introduction to Environmental Technology (3 units)

B1a-B1b (1.5-1.5) equivalent to B1ab

An introduction to the overall scope of Hazardous Materials Technology. Emphasizes legal definitions, terminology, and regulatory framework. Included is an historical background, career opportunities, governmental processes, and an overview of major hazardous materials handling and management procedures and requirements. **Prerequisite:** B1b: ENVT B1a. **Recommended:** B1a: Reading Level 5 or 6. **Hours:** (27-27) 3 lect/disc for 9 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ENVT B10 Safety and Emergency Response (1-1.5 units)

Modules designed to meet OSHA health and safety training requirements for hazardous materials and waste workers. ENVT B10a meets the 24-hour Hazardous Waste Worker Certification requirements. Three modules combined meet the 40-hour "hands on" certification requirements. Module "a" should be taken prior to "b" and "c." **Recommended:** ENVT B49/CHEM B49 or CHEM B15 and B16. **Hours:** (24-54) 1.5 to 3 lect/lab. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ENVT B10a Hazardous Materials Awareness and Safety (1 unit)

Health and safety aspects of working with hazardous materials. Emphasizes recognition of hazardous materials and the nature of worksite hazards. Included is a study of hazard classifications, laws and regulations applying to worker health and safety, types of health effects, personal protective equipment, risk reduction processes, and health and safety planning processes. Designed to meet general requirements of OSHA Hazardous Materials Training for work not requiring the use of respiratory protection. **Recommended:** ENVT B49/CHEM B49 or CHEM B15 and B16. **Hours:** (24) 3 lect for 8 weeks. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ENVT B10b Spill Control and Emergency Response (1.5 units)

Procedures for safety and emergency response to chemical spills in industrial and field setting. Focus on various spill control containment, and mitigation procedures, and development and implementation of a personal protective program pursuant to OSHA standards. **Recommended:** ENVT B49/CHEM B49 or CHEM B15 and B16. **Hours:** (45) 1.5 lect, 1.5 lab for 15 weeks. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ENVT B10c Decision Making in Emergencies (1.5 units)

Safety and emergency response to chemical and physical exposures in industrial and field settings. Focus on hazardous analysis and emergency response planning including: contingency and emergency plans; hazard identification; vulnerability analysis and risk evaluation; response functions, and incident command functions. **Recommended:** ENVT B49/CHEM B49 or CHEM B15 and B16. **Hours:** (45) 1.5 lect, 1.5 lab for 15 weeks. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ENVT B15 Hazardous Materials Management Applications (1-1.5 units)

Modules designed to cover the requirements and applications of federal, state, and local laws and regulations relating to hazardous materials management. **Recommended:** ENVT B49/CHEM B49 or CHEM B15 and B16, ENVT B1, ENVT B30. **Hours:** (18-45) 3 lect or 3 lect/lab. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ENVT B15a Right to Know Laws (1.5 units)

Covers California and federal OSHA Hazard Communication Standards, Hazardous Material Emergency Planning and Community Right-to-Know regulations, and California's Safe Drinking Water & Toxic Enforcement Act. Emphasizes applications of these laws and regulations in the workplace, including proper labeling and handling of hazardous materials, obtaining MSDSs; and planning and reporting functions. **Recommended:** ENVT B1ab, ENVT B49/CHEM B49 or CHEM B15 and B16. **Hours:** (45) 1.5 lect, 1.5 lab for 15 weeks. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ENVT B15b Transportation and Storage of Hazardous Materials (1.5 units)

Focuses on California and Federal Transportation and Underground Tank regulations. Emphasizes applications of laws and regulations in the work of environmental technicians in industry, including proper completion of shipping papers; obtaining permits for operating, installing or closing underground tank facilities, and general planning and reporting functions. **Recommended:** ENVT B1ab, ENVT B49/CHEM B49 or CHEM B15 and B16. **Hours:** (45) 1.5 lect, 1.5 lab for 15 weeks. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ENVT B15c Air Quality Issues (1 unit)

Focuses on California federal, state and local air quality issues. Emphasizes applications of laws, regulations, and procedures in industry including, identification of toxic air pollutants, new source review and permitting, and general planning and reporting functions. **Recommended:** ENVT B1ab, ENVT B49/CHEM B49 or CHEM B15 and B16. **Hours:** (18) 3 lect for 6 weeks. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ENVT B20 Hazardous Waste Generation, Reduction and Treatment (3 units)

The use of chemicals and materials in industrial processes and hazardous waste generation/reduction. Waste streams of seven selected industry categories will be covered. Examines applicable regulations and material balance concept of inventory. **Prerequisites:** CHEM B15 and B16 or ENVT B49. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ENVT B30 Health Effects of Hazardous Materials (3 units)

Acute and chronic health effects produced by exposure to chemical, physical, and biological agents. Emphasis is on hazardous materials commonly associated with industrial operations, waste disposal, and remediation sites. Topics include routes of entry, toxic effects, risk evaluation, permissible exposure limits, medical surveillance, control methods for reducing exposure, and understanding an MSDS. **Prerequisite:** BIOL B18 or equivalent. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ENVT B40 Hazardous Waste Management Applications (1-1.5 units)

Modules designed to cover the requirements and applications of federal, state, and local laws and regulations relating to hazardous waste management. **Recommended:** ENVT B49/CHEM B49 or CHEM B15 and B16, ENVT B1. **Hours:** (18-45) 3 lect or 3 lect/lab. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ENVT B40a Generator Requirements (1.5 units)

Requirements and applications of federal, state and local laws and regulations relating to hazardous waste management, including California and federal requirements for generators of hazardous waste. Emphasis on applications of laws and regulations applicable to industry including proper labeling, packaging, placarding, and manifesting of hazardous waste; storage requirements; permitting; and general planning and reporting functions. **Recommended:** ENVT B1ab; ENVT B49/CHEM B49, or CHEM B15 and B16. **Hours:** (45) 1.5 lect, 1.5 lab for 15 weeks. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ENVT B40b Sampling and Analysis (1.5 units)

Requirements and applications of environmental sampling, methodology, equipment recognition and maintenance, calibration procedures, basic analytical techniques, and data interpretation. Selecting and working with analytical service laboratories, use and development of sampling plans, and performance of basic tests using typical field equipment will also be covered. **Recommended:** ENVT B1ab; ENVT B49/CHEM B49, or CHEM B15 and B16. **Hours:** (45) 1.5 lect, 1.5 lab for 15 weeks. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges

ENVT B40c Special Topics in Hazardous Waste Management (1 unit)

Requirements and applications of federal, state, and local laws and regulations relating to hazardous waste management as well as focus on California and federal requirements for special hazardous waste management areas. Emphasizes applications of laws and regulations including: overlapping agency jurisdictions; real estate transactions; infectious waste control; and household hazardous waste. **Recommended:** ENVT B1ab; ENVT B49/CHEM B49, or CHEM B15 and B16. **Hours:** (18) 3 lect for 6 weeks. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ENVT B49 Applied Chemistry (4 units)

The systematic study of the principles of applied inorganic, organic, and biochemistry using a qualitative and quantitative approach. Topics include physical principles of chemistry; inorganic compounds and reactions; basic and applied nuclear chemistry, (including radioactivity, nuclear energy, uses of radioisotopes, radiation hazards); a survey of organic chemistry (classification, compounds, reactions, nomenclature); biochemistry (classification, composition, reactions in living organisms). The course emphasizes technical aspects of chemistry relating to everyday processes and industrial and environmental applications. **Prerequisite:** MATH BA or equivalent. **Recommended:** Reading Level 5 or 6. **Hours:** (108) 3 lect, 1 disc, 2 lab. Field trips may be required. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. **Note:** Not open to students with credit in CHEM B49.

INDUSTRIAL DRAWING

Credit limitations may apply. For specific information see a counselor or the transfer institution.

INDR B10 Introduction to Industrial Drawing and Graphics (1 unit)

Introductory course dealing with conventional drafting methods to obtain graphic solutions, design, modifications and delineations for industrial, architectural, engineering and interior drawings. Emphasizes basic drafting skills. **Recommended:** Reading Level 5 or 6. **Hours:** (36) 2 lect, 2 lab for 9 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

INDR B11 Introduction to Computer Aided Drafting and Design (CAD) (1 unit)

Introductory course utilizing a computer aided drafting and design (CAD) system to obtain graphic solutions, design refinements, modifications, and delineations for industrial, architectural, and engineering drawings. Emphasizes building skills necessary to function as a CAD operator in industry. **Recommended:** Reading Level 5 or 6. **Hours:** (36) 2 lect, 2 lab for 9 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

INDR B16 Introduction to 3D Animation (1 unit)

Introductory course utilizing 3D animation software and hardware to obtain photo realistic graphics for use in industrial and broadcast applications. Emphasizes building basic skills necessary to do these applications on an entry level. **Recommended:** INDR B11. **Hours:** (36) 2 lect, 2 lab for 9 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

INDR B20a Computer Aided Drafting and Design (CAD) (3 units)

An intensive study utilizing a computer aided drafting and design (CAD) 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 CAD operator. **Prerequisites:** INDR B11, INDR B10 or equivalent experience to be evaluated by the instructor. **Recommended:** Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

INDR B20b Computer Aided Drafting and Design (CAD) (3 units)

Continuation of the sequence to utilize the CAD 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 CAD operator. **Prerequisite:** INDR B20a. **Hours:** (108) 2 lect, 4 lab. Field trips required. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Elective credit only.

INDR B30b Industrial Drawing (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-views, pictorial sketching and drawing, revolutions, dimensioning practices, shop processes, fasteners, springs and threads, inking, graphs, and general drawing presentation. **Recommended:** INDR B10 with a minimum grade of "D" or two years of high school drafting with grades of "B" or evaluation

by instructor of student's mechanical drawing skills. Reading Level 5 or 6. **Hours:** (108) 2 lect, 4 lab. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

INDR B37 Introduction to Geographic Information Systems (GIS) (3 units)

An introduction to methods of managing and processing spatial data. Covers the basic assumptions, concepts, theories, and structures of geographic information systems. Hands-on experience in data input, management, analysis, and display. **Recommended:** Minimum one year of high school algebra or MATH BA (may be taken concurrently). **Hours:** (108) 3 lect, 3 lab by arrangement. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, COMS B37.

INDR B50 Process Piping (3 units)

Develops knowledge of essential techniques of process piping drafting. Serves as a phase of training to become piping drafter. Includes piping plans, isometrics, orthographics, and process flow diagrams. **Prerequisite:** INDR B10. **Hours:** (108) 3 lect, 3 lab. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

INDR B51 Electrical Design (3.0 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). **Prerequisites:** INDR B10 or two years of high school drafting with a grade of "B" or ELET B2. **Recommended:** Reading Level 5 or 6, INDR B11. **Hours:** (108) 2 lect, 4 lab. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

INDR B52 Geographic Information Systems (GIS) (3 units)

Modern Geographic Information Systems. Solving problems in either Land Information Systems, or Facilities Management Systems. Database management will also be emphasized. **Prerequisite:** INDR B20a. **Hours:** (108) 2 lect, 4 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

INDR B55 Geometric Dimensioning and Tolerancing (1 unit)

An introductory course in the application and interpretation of geometric dimensioning and tolerancing concepts according to the latest revision of ANSI Y 14.5. This course is designed for persons working or preparing to work in the field of

drafting, engineering, manufacturing, quality control and inspection. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 1 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

INDUSTRIAL TECHNOLOGY

Credit limitations may apply. For specific information see a counselor or the transfer institution.

INDT B10 Introduction to Industrial Technology (0.5 unit)

Orientation to Bakersfield College and post-secondary education in California. Survey of various fields of industrial technology, career opportunities and requirements, development of a personal education plan. Satisfies the 0.5 unit educational planning requirement for graduation from Bakersfield College. **Recommended:** Reading Level 5 or 6. **Hours:** (9) 1 lect/disc for 9 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

INDT B50 Managing Quality Organizations (3 units)

Incorporates the systematic approach to constant improvement throughout an organization. Introduces themes, teams, tools/techniques of continuous quality improvement. Emphasizes the quality systems approach to: customer focus; and employee involvement in service, retail and manufacturing situations. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students have taken the equivalent course, MGMT B50.

INDT B90 Occupational Readiness (5 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:** Concurrent enrollment in either WELD B290 or AUTO B290. **Hours:** (180) 10 lect. Open entry/exit. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

INDT B249ab Cooperative Work Experience Education (1-4 units. Limit 16 units)

See WEXP B249ab description.

WATER TECHNOLOGY

WTRT B51 Basic Water Treatment (3 units)

Prepares the entrance level student for Water Facility Operator Certification, Grades T-1 and T-2 and/or to inform the interested public in the methodology used for the purification of domestic drinking water. **Hours:** (54) 3 lect. Field trips required. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

WTRT B52 Basic Water Distribution (3 units)

Prepares the student to obtain Grade D-1 certification from the American Water Works Association and/or to inform interested parties in the methods involved in accepted distribution systems and operations. **Hours:** (54) 3 lect. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

WTRT B53 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. **Recommended:** High School CHEM or job related experience, Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

WELDING**WELD B1a-B1b 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, PAC, MIG, TIG, submerged ARC, resistance welding and joint design, codes and weld testing. **Recommended:** Reading Level 5 or 6. **Hours:** (54-54) 1 lect, 2 lab. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

WELD B53a-B53b 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. **Recommended:** Reading Level 5 or 6. **Hours:** (54-54) 1 lect, 2 lab. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

WELD B54a Blueprint Reading for Welders and Machinists (3 units)

Principles of blueprint reading as applied to the welding and machine trades. Emphasis will be placed on the ability to visualize and interpret working drawings. Welding symbols and basic shop math are also included. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

WELD B54b 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. **Prerequisite:** WELD B54a with a grade of "C" or evaluation by instructor of student's equivalent experience. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

WELD B55a-B55b Structural Plate Certification (1.5-1.5 units)

Safety, introduction to welding codes, welding discontinuities and practical welding. Experience on plate with shielded metal arc welding, based on the American Welding Society DI.1 structural code. **Recommended:** WELD B53b or three years work experience as a welder. **Hours:** (54-54) 1 lect, 2 lab. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

WELD B55c-B55d ASME Pipe Certification (1.5-1.5 units)

Weld, safety, welding pipe in the 1G, 2G and 5G positions. An examination of the ASME Welding Code will also be covered. **Prerequisites:** WELD B55a with a grade of "C." **Recommended:** Reading Level 5 or 6. **Hours:** (54-54) 1 lect, 2 lab. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

WELD B55e-B55f 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:** WELD B55c-B55d with a grade of "C." **Recommended:** Reading Level 5 or 6. **Hours:** (54-54) 1 lect, 2 lab. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

WELD B74a-B74b 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. **Recommended:** WELD B1a or WELD B53a or one year work experience as a welder. **Hours:** (54-54) 1 lect, 2 lab. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

WELD B90 General Welding (12 units)

Entry-level welding skill development in modern welding and cutting processes, theory and practice. **Prerequisites:** Concurrent enrollment in INDT B290. **Hours:** (450) 6 lect, 19 lab. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

WOOD

Credit limitations may apply. For specific information see a counselor or the transfer institution.

WOOD B1 Creative 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. **Recommended:** Reading Level 5 or 6. **Hours:** (108) 2 lect, 4 lab. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

WOOD B2 Furniture and Cabinetmaking (3 units)

Skill development on the use and care of portable and stationary woodworking machines. The use of basic wood joint techniques, surface preparation, gluing, clamping and assembly is emphasized. **Recommended:** Reading Level 5 or 6. **Hours:** (108) 2 lect, 4 lab. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

WOOD B5 Intermediate Cabinetmaking (3 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 B2 or evaluation by instructor. **Recommended:** Reading Level 5 or 6. **Hours:** (108) 2 lect, 4 lab. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only.

WOOD B65a Advanced Cabinetmaking (3 units)

Machine woodworking emphasizing new designs including modular as well as European cabinet construction, new materials and processes, Kortron, malamine, high density particle board, as well as others. Advanced bidding techniques are discussed. **Prerequisite:** WOOD B5 or evaluation by instructor. **Hours:** (108) 2 lect, 4 lab. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

WOOD B65b Advanced Cabinetmaking (3 units)

Machine and hand techniques necessary for top-end construction emphasized. Non-residential type cabinets studied. Economical use of solid lumbers 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 B65a or evaluation by instructor. **Hours:** (108) 2 lect, 4 lab. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.



Art

Art

Computer Graphic Art

Photography

CERTIFICATE OF ACHIEVEMENT**Computer Graphic Art Certificate of Achievement**

The program is designed to prepare students for entry level positions in various graphic art fields such as advertising, graphic design, illustration, and digital imaging. The core learned disciplines are the principles of design, an understanding of the visual elements, exposure to art and design history, conceptual visual problem solving, and the production of a graphic portfolio using established computer graphic software.

Required Courses: 27 units

Course Number	Title	Units
ART B1 or ART B30a or ART B30b or ART B30c or ART B30d	Art Appreciation Ancient Mediterranean Art Medieval Art Renaissance Art Modern Art	3.0
ART B2ab or ART B2ef	Basic Drawing Figure Drawing	3.0
ART B3ab	Basic Design	3.0
ART B20	Introduction to Computer Graphics	3.0
ART B21	Graphic Design	3.0
ART B22	Computer Illustration	3.0
ART B23	Advertising Design	3.0
ART B25	Typography	3.0

Electives: at least 3 units

Course Number	Title	Units
ART B17ab	Elementary Photography	3.0
ART B24	Digital Imaging	3.0
ART B50	3d Modeling and Illustration	3.0

Photography Certificate of Achievement

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.

Required Courses: 23 units

Course Number	Title	Units
ART B2ab or ART B2ef	Basic Drawing Figure Drawing	3.0
ART B3ab	Basic Design	3.0
ART B3ef	Fundamentals of Color 1	3.0
ART B17ab	Elementary Photography	3.0
ART B17cd	Intermediate Photography	3.0
ART B17gh	Advanced Photography	3.0
ART B18ab	Individual Projects in Photography	2.0

Electives: at least 3 units

Course Number	Title	Units
ART B1	Art Appreciation	3.0
ART B30a	Ancient Mediterranean Art	3.0
ART B30b	Medieval Art	3.0
ART B30c	Renaissance Art	3.0
ART B30d	Modern Art	3.0

ASSOCIATE IN ARTS DEGREE PROGRAMS

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**Required Courses: 18 units**

Course Number	Title	Units
ART B2ab or ART B2ef	Basic Drawing Figure Drawing	3.0
ART B3ab or ART B3ef	Basic Design Fundamentals of Color 1	3.0
ART B1 or ART B30a or ART B30b or ART B30c or ART B30d	Art Appreciation Ancient Mediterranean Art Medieval Art Renaissance Art Modern Art	3.0

Electives: at least 9 units

ART B2, B3, B4 and B5 Painting and Drawing Series
 ART B7 Ceramic Series
 ART B8 Jewelry Series
 ART B9 Glass Design Series
 ART B11, B12 Sculpture Series
 ART B13cd Beginning Printmaking: Intaglio and Monoprint
 ART B17, B18 Photography Series
 ART B20 to B25, B50 Computer Graphic Art Series
 ART B30 Art History Series

Computer Graphic Art**Required Courses: 18 units**

Course Number	Title	Units
ART B20	Introduction to Computer Graphics	3.0
ART B21	Graphic Design	3.0
ART B22	Computer Illustration	3.0
ART B23	Advertising Design	3.0
ART B25	Typography	3.0

Electives: at least 3 units

Course Number	Title	Units
ART B2ab	Basic Drawing	3.0
ART B2ef	Figure Drawing	3.0
ART B3ab	Basic Design	3.0
ART B1 or ART B30a or ART B30b or ART B30c or ART B30d	Art Appreciation Ancient Mediterranean Art Medieval Art Renaissance Art Modern Art	3.0
ART B17ab	Elementary Photography	3.0
ART B24	Digital Imaging	3.0
ART B50	3D Modeling and Illustration	3.0

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

ART

Credit limitations may apply. For specific information see a counselor or the transfer institution.

ART B1 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. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B2ab Basic Drawing (3 units)

B2a-B2b (1.5-1.5) equivalent to B2ab.
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. **Prerequisite:** B2b: ART B2a with a grade of "C." **Recommended:** B2a: Reading Level 5 or 6. **Hours:** (2ab-108) 6 lect/studio. Field trips required. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (ART B2a+B2b = CAN ART 8)

ART B2ef Figure Drawing (3 units)

B2e-B2f (1.5-1.5) equivalent to B2ef.
A beginning course in drawing design 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:** B2f: ART B2e with a grade of "C." **Recommended:** B2e: Reading Level 5 or 6. **Hours:** (B2ef-108) 6 lect/studio. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B2gh Advanced Figure Drawing (3 units)

B2g-B2h (1.5-1.5) equivalent to B2gh.
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 B2ef with a grade of "C." **Hours:** (B2gh-108) 6 lect/studio. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B2ij Advanced Projects in Drawing (3 units)

B2i-B2j (1.5-1.5) equivalent to B2ij.
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. **Prerequisites:** B2i: ART B2gh with a grade of "C." B2j: ART B2i with a grade of "C." **Hours:** (B2ij-108) 6 lect/studio. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B3ab Basic Design (3 units)

B3a-B3b (1.5-1.5) equivalent to B3ab.
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. **Prerequisites:** B3b: ART B3a with a grade of "C." **Recommended:** B3a: Reading Level 5 or 6. **Hours:** (B3ab-108) 6 lect/studio. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (ART B3a+B3b = CAN ART 14)

ART B3ef Fundamentals of Color 1 (3 units)

B3e-B3f (1.5-1.5) equivalent to B3ef.
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:** B3f: ART B3e with a grade of "C." **Recommended:** B3e: Reading Level 5 or 6. **Hours:** (B3ef-108) 6 lect/studio. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B3gh Fundamentals of Color 2 (3 units)

B3g-B3h (1.5-1.5) equivalent to B3gh.
Fundamental color mechanics and aesthetics as they relate to design and graphic applications. **Prerequisites:** B3g: ART B3ef with a grade of "C." B3h: ART B3g with a grade of "C." **Hours:** (B3gh-108) 2 lect, 4 studio. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B4ab Basic Painting - Acrylic Media (3 units)

B4a-B4b (1.5-1.5) equivalent to B4ab.
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:** B4b: ART B4a with a grade of "C." **Recommended:** B4a: Reading Level 5 or 6. **Hours:** (B4ab-108) 2 lect, 4 studio. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (ART B4a+B4b = CAN ART 10)

ART B4cd Advanced Painting - Acrylic Media (3 units)

B4c-B4d (1.5-1.5) equivalent to B4cd.

An extension of ART B4ab. Emphasizes shifts from technical information to problems of composition and design. **Prerequisites:** B4c: ART B4ab with a grade of "C." B4d: ART B4c with a grade of "C." **Hours:** (B4cd-108) 6 lect/studio.

Offered: F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B4ef Water Color Painting (3 units)

B4e-B4f (1.5-1.5) equivalent to B4ef.

ART B4e is a systematic study of watercolor techniques and materials; B4f is a study of the aesthetic application of those techniques in composition. **Prerequisite:** B4f: ART B4e with a grade of "C." **Recommended:** B4e: Reading Level 5 or 6.

Hours: (B4ef-108) 6 lect/studio. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B5ab Basic Oil Painting (3 units)

B5a-B5b (1.5-1.5) equivalent to B5ab.

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:** B5b: ART B5a with a grade of "C."

Recommended: B5a: Reading Level 5 or 6. **Hours:** (B5ab-108) 6 lect/studio. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B5cd Basic Oil Painting (3 units)

B5c-B5d (1.5-1.5) equivalent to B5cd.

Various painting supports, grounds, paints, oils, dryers, and varnishes. Emphasizes compositional elements and their effects on visual dynamics regardless of subject matter.

Prerequisites: B5c: ART B5ab with a grade of "C." B5d: ART B5c with a grade of "C." **Hours:** (B5cd-108) 2 lect, 4 studio. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B5ef Intermediate Oil Painting (3 units)

B5e-B5f (1.5-1.5) equivalent to B5ef.

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 B5ab and B5cd.

Prerequisites: B5e: ART B5cd with a grade of "C." B5f: ART B5e with a grade of "C." **Hours:** (B5ef-108) 2 lect, 4 studio. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B5gh Advanced Oil Painting (3 units)

B5g-B5h (1.5-1.5) equivalent to B5gh.

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. **Prerequisites:** B5g: ART B5ef with a grade of "C." B5h: ART B5g with a grade of "C." **Hours:** (B5gh-108) 6 lect/studio.

Offered: F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B7ab Ceramics - Basic (3 units)

B7a-B7b (1.5-1.5) equivalent to B7ab.

Basic ceramic materials and techniques. Preparation, handbuilding, wheel throwing, design techniques and glaze application are explored. **Prerequisite:** B7b: ART B7a with a grade of "C." **Recommended:** B7a: Reading Level 5 or 6.

Hours: (B7ab-108) 2 lect, 4 studio. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B7cd Ceramics - Intermediate (3 units)

B7c-B7d (1.5-1.5) equivalent to B7cd.

Exploration of glaze calculation and kiln firing including advanced work in basic techniques of methods, concepts, and materials related to clay. **Prerequisites:** B7c: ART B7ab with a grade of "C." B7d: ART B7c with a grade of "C." **Hours:** (B7cd-108) 2 lect, 4 studio.

Offered: F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B7ef Ceramics - Advanced (3 units)

B7e-B7f (1.5-1.5) equivalent to B7ef.

Designed to offer the student an opportunity to further develop basic ceramic skills. Advanced work in glaze calculations, kiln firing and clay constructions. **Prerequisite:** B7e: ART B7cd with a grade of "C." B7f: ART B7e with a grade of "C." **Hours:** (B7ef-108) 6 lect/studio. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B7gh Ceramics - Advanced (3 units)

B7g-B7h (1.5-1.5) equivalent to B7gh.

Special projects in advanced ceramic techniques. Individual research problems in kiln building, wheel building, tool construction and production techniques. **Prerequisites:** B7g: ART B7ef with a grade of "C." B7h: ART B7g with a grade of "C." **Hours:** (B7gh-108) 2 lect, 4 studio. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B8ab Jewelry (3 units)

B8a-B8b (1.5-1.5) equivalent to B8ab.

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:** B8b: ART B8a with a grade of "C."

Recommended: B8a: Reading Level 5 or 6. **Hours:** (B8ab-

108) 6 lect/studio. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

ART B8cd Advanced Jewelry (3 units)

B8c-B8d (1.5-1.5) equivalent to B8cd.

A continuation of beginning jewelry with an explanation of the "lost wax process," experimental casting and stone setting. **Prerequisites:** B8c: ART B8ab with a grade of "C." B8d: ART B8c with a grade of "C." **Hours:** (B8cd-108) 6 lect/studio. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

ART B8ef Advanced Jewelry (3 units)

B8e-B8f (1.5-1.5) equivalent to B8ef.

A continuation of ART B8cd with emphasis on electroforming, electroplating and surface embellishment. Individual projects are encouraged for all students stressing imaginative and creative interests. **Prerequisites:** B8e: ART B8cd with a grade of "C." B8f: ART B8e with a grade of "C." **Hours:** (B8ef-108) 6 lect/studio. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

ART B8gh Advanced Jewelry (3 units)

B8g-B8h (1.5-1.5) equivalent to B8gh.

A continuation of ART B8ef with emphasis on independent study, special problems and marketing procedures. **Prerequisites:** B8g: ART B8ef with a grade of "C." B8h: ART B8g with a grade of "C." **Hours:** (B8gh-108) 6 lect/studio. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

ART B9ab Glass Design - Glass Blowing (3 units)

B9a-B9b (1.5-1.5) equivalent to B9ab.

Basic techniques of handblown glass including glass as an expressive medium in a leaded glass panel. **Prerequisite:** B9b: ART B9a with a grade of "C." **Recommended:** B9a: Reading Level 5 or 6. **Hours:** (B9ab-108) 2 lect/demo, 4 studio. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

ART B9cd Advanced Glass Design (3 units)

B9c-9d (1.5-1.5) equivalent to B9cd.

Advanced techniques of off-hand glass blowing. Extended exploration of the medium of art glass including more advanced blowing techniques, exploration of color, decoration and studio construction. **Prerequisites:** B9c: ART B9ab with a grade of "C." B9d: ART B9c with a grade of "C." **Hours:** (B9cd-108) 2 lect/demo, 4 studio. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

ART B11ab Sculpture (3 units)

B11a-B11b (1.5-1.5) equivalent to B11ab.

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:** B11b: ART B11a with a

grade of "C." **Recommended:** B11a: Reading Level 5 or 6. **Hours:** (B11ab-108) 6 lect/studio. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (ART B11a+B11b = CAN ART 12)

ART B11cd Advanced Sculpture (3 units)

B11c-B11d (1.5-1.5) equivalent to B11cd.

Advanced study in the exploration of sculptural concepts. Emphasizes expressive meaning of form and potential of materials. **Prerequisites:** B11c: ART B11ab with a grade of "C." B11d: ART B11c with a grade of "C." **Hours:** (B11cd-108) 6 lect/studio. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B12ab Figure Sculpture (3 units)

B12a-B12b (1.5-1.5) equivalent to B12ab.

Emphasis on perceiving and establishing the human form in sculptural materials. **Prerequisite:** B12b: ART B12a with a grade of "C." **Recommended:** B12a: Reading Level 5 or 6. **Hours:** (B12ab-108) 6 lect/studio. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B12cd Advanced Figure Sculpture (3 units)

B12c-B12d (1.5-1.5) equivalent to B12cd.

Emphasis on perceiving and establishing the human form in sculptural materials. **Prerequisite:** B12c: ART B12ab with a grade of "C." B12d: ART B12c with a grade of "C." **Hours:** (B12cd-108) 6 lect/studio. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B13cd Beginning Printmaking: Intaglio and Monoprint (3 units)

B13c-B13d (1.5-1.5) equivalent to B13cd.

Expressive potential of the fine art print through the knowledge gained in intaglio and monotype printing techniques. **Prerequisite:** B13d: ART B13c with a grade of "C." **Recommended:** B13c: Reading Level 5 or 6. **Hours:** (B13cd-108) 2 lect, 4 studio. **Repeat:** 3. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

ART B17ab Elementary Photography (3 units)

B17a-B17b (1.5-1.5) equivalent to B17ab.

Study of the basic principles of cameras, optics, light, film and development, exposure and exposure meters and enlarging. Emphasis is on photographic quality, exploration of the photographer's environment, and personal expression. A suitable adjustable camera is recommended. **Recommended:** B17a: Reading Level 5 or 6. **Hours:** (B17ab-108) 6 lect/studio. Field trips required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (ART B17a+B17b = CAN ART 18)

ART B17cd Intermediate Photography (3 units)

B17c-B17d (1.5-1.5) equivalent to B17cd.

The student will complete assignments that will emphasize the refinement of technique and personal expression. A

suitable adjustable camera is required. **Recommended:** ART B17ab with a grade of "C." **Hours:** (B17cd-108) 6 lect/studio. Field trips required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ART B17gh Advanced Photography (3 units)

B17g-B17h (1.5-1.5) equivalent to B17gh. Study of photography in an area of specialized interest. Advanced work is done in camera technique, darkroom practices and studio. Emphasis is on area of personal interest. Technically proficient work of a creative and original nature is expected. **Recommended:** ART B17cd with a grade of "C." **Hours:** (B17gh-108) 6 lect/studio. Field trips required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. Note: Elective credit only.

ART B18ab Individual Projects in Photography (2 units)

B18a-B18b (1-1) equivalent to B18ab. 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. **Recommended:** Evaluation by instructor of student's photography skills. **Hours:** (B18ab-72) 1 lect, 3 studio. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. Note: Elective credit only.

ART B20 Introduction to Computer Graphics (3 units)

The principles and techniques of graphic design and illustration using computer technology. A working knowledge of basic computer graphic operations as the vehicle for creating effective 2-dimensional graphic communications. **Recommended:** Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ART B21 Graphic Design (3 units)

A study of the tools, concepts and techniques which are incorporated into the development of printed communications. The designing of graphics with production methods in mind. Macintosh Systems computers will be used. **Recommended:** ART B20 and Reading Level 5 or 6. **Hours:** (108) 6 lab. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ART B22 Computer Illustration (3 units)

Principles and techniques of creating original illustrations for print. Computer drawing and painting techniques used to create illustrations in various styles such as editorial, technical, scientific, informational, personal, etc. Emphasis placed on graphic problem solving and the importance of concept, from roughs to finished illustration. Typography will be considered as an integral element to most illustration. **Prerequisite:** ART B20 or equivalent. **Hours:** (108) 3 lect, 3 lab. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ART B23 Advertising Design (3 units)

A study of advertising design from concept through execution. Designing visual images for effective communication. Emphasis is on design for various media: print, outdoor, P.O.P., multimedia. Macintosh Systems computers will be used. **Recommended:** ART B20 and Reading Level 5 or 6. **Hours:** (108) 6 lab. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only.

ART B24 Digital Imaging (3 units)

Concepts and techniques of digital image processing. Image creation, scanning, editing, compositing, re-touching, and problem solving using bit-mapped, raster based software. Emphasis on projects using a variety of methods to manipulate and process images. Color systems and output options to various media will be considered. Specific design problems will be presented as the vehicle for understanding. Processes such as painting, masking, layering, color correcting, separating, and effects filtering will be introduced. **Recommended:** ART B20 or equivalent. **Hours:** (108) 3 lect, 3 lab. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ART B25 Typography (3 units)

The role and application of typography in visual communication. A study in the evolution of letterforms to the digital type styles of today. Emphasis on concept development and design craftsmanship as students explore traditional and computer-assisted techniques. Structure, format, legibility, and expression will be considered. Typographic emphasis will be placed on projects related to various graphic design media. **Prerequisite:** ART B20. **Hours:** (108) 3 lect, 3 lab. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ART B30a Survey of World Art, Prehistory Through Islam (3 units)

Slide lecture survey of the architecture, sculpture and painting of the ancient Mediterranean area from the Paleolithic age through the rise of Islam.. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F alternate years. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (ART B30a + B30b = CAN ART 2)

ART B30b Survey of World Art, Non-Western Cultures and Medieval Europe (3 units)

Slice lecture survey of the architecture, sculpture and painting of Africa, the Americas, China, India, Japan, and Medieval Europe. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** S alternate years. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (ART B30a + B30b = CAN ART 2)

ART B30c Survey of World Art, 14th Century Through 17th Century (3 units)

Slice lecture survey of the architecture, sculpture and painting of the European Renaissance as well as that of the non-Western world. Included are the cultures of India, China, Japan, the Americas and the Pacific cultures. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F alternate years. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (ART B30c + B30d = CAN ART 4)

ART B30d Survey of World Art, 18th Century Through 20th Century (3 units)

Slide lecture survey of the architecture, sculpture and painting of the Western and non-Western world. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** S alternate years. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (ART B30c + B30d = CAN ART 4)

ART B50 3D Modeling and Illustration (3 units)

The development of 3D computer models and environments for 3D illustration, production and animation design. Imagery will be created with 3D modeling, painting, texture mapping, shading, lighting, and rendering techniques. Hierarchical and basic motion techniques in 3D space will be considered.

Course functions as an introductory course into the field of 3D animation for film, video and multimedia. **Prerequisite:** ART B20. **Hours:** (108) 3 lect, 3 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

Behavioral Sciences

Anthropology
Human Services
Psychology
Sociology

All behavioral science courses with a course number of 49 and below will transfer to state colleges, University of California campuses and to private colleges.

Described below are requirements which must be met by the student who wishes to earn an Associate Degree from Bakersfield College in either Anthropology, Psychology, Sociology or Human Services.

Students should be aware that these requirements are specific to Bakersfield College and do not necessarily apply to a college or university to which they intend to transfer. Most four-year institutions limit the number of lower division units which can be counted toward one's major; therefore, some courses taken at Bakersfield College may count only as elective credit. A counselor should be consulted for accurate advice. It is strongly recommended that transfer students check with the four-year college to which they plan to transfer about the transferability of any course taken at Bakersfield College.

ASSOCIATE IN ARTS DEGREE PROGRAM

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. Most graduates with a degree in anthropology are likely to pursue careers in teaching, government service, research, law, and business.

Required Courses: 18 units

Course Number	Title	Units
ANTH B1	Physical Anthropology	3.0
ANTH B2	Cultural Anthropology	3.0
ANTH B5	North American Indians	3.0
PSYC B1a	General Psychology	3.0
SOCI B1	Introduction to Sociology	3.0
	Elective-any Behavioral Science course	3.0

Human Services

The Associate in Arts Degree in Human Services will include general requirements for the Associate in Arts Degree. The major in Human Services provides the student with an academic background for entry-level positions in various human services agencies. It also prepares the student for upper-division work in human services and other behavioral sciences.

General Requirements

General requirements for an Associate in Arts Degree shall be met as specified in the graduation section of the current catalog.

Discipline Requirements

Discipline requirements shall include a minimum of 19 units for the Associate in Arts Degree in Human Services. Students must complete all required courses.

Required Courses: 19 units

Course Number	Title	Units
HMSV B40	Introduction to Human Services	
SOCI B1	Introduction to Sociology	3.0
SOCI B45	Minority Relations	3.0
PSYC B1a	General Psychology	3.0
PSYC B40 or CHDV B13a	Child Psychology and Development Child Growth and Development	3.0

Electives: Any combination of four units from the following three courses is required. Note: All units must be completed in agencies where assignment and supervision is approved by Program Director.

Course Number	Title	Units
BEHS B248	Cooperative Work Experience Education	1-4.0
BEHS B249	Cooperative Work Experience Education	1-4.0
HMSV B5	Human Services Internship	1-4.0

Psychology

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

Minimum units required in discipline: 19

Required Courses

Course Number	Title	Units
PSYC B1a	General Psychology	3.0
PSYC B5	Elementary Statistics for the Behavioral and Social Sciences	4.0
PSYC B40	Child Psychology	3.0
SOCI B1	Introduction to Sociology	3.0
ANTH B2	Cultural Anthropology	3.0
PSYC B20 or PSYC B30 or PSYC B37 or PSYC B45 or PSYC B1b or PSYC B31 or PSYC B33 or PSYC B8 or PSYC B2 or PSYC B6	Social Psychology Human Sexuality Psychology of Gender Roles Behavior Modification Biological Psychology Marriage Personal and Social Adjustment Introduction to Social Gerontology Interpersonal & Group Process Skills for the Helping Occupations Introduction to Behavioral and Social Science Research	3.0

Sociology

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

Required Courses: 19 units

Course Number	Title	Units
SOCI B1	Introduction to Sociology	3.0
SOCI B2	Problems in Modern Society	3.0
SOCI B20 or PSYC B20 or PSYC B45 or SOCI B45 or GERO B8 or HMSV B8	Social Psychology	3.0
PSYC B45 or SOCI B45 or GERO B8 or HMSV B8	Behavior Modification	
SOCI B45 or GERO B8 or HMSV B8	Minority Relations	
GERO B8 or HMSV B8	Introduction to Social Gerontology	
HMSV B8	Introduction to Social Gerontology	
PSYC B1a	General Psychology	3.0
ANTH B2	Cultural Anthropology	3.0
PSYC B5	Elementary Statistics for the Behavioral and Social Sciences	4.0

ASSOCIATE IN SCIENCE DEGREE PROGRAM

Human Services

The Associate in Science Degree in Human Services will include the general requirements for the Associate in Science Degree. The major in Human Services provides the student with an academic background for entry-level positions in various human services agencies. It also prepares the student for upper-division work in human services and the other behavioral sciences.

General Requirements

General requirements for an Associate in Science Degree shall be met as specified in the graduation section of the current catalog.

Discipline Requirements

Discipline requirements shall include a minimum of 30 units for the Associate in Science degree in Human Services. Students must complete all required courses.

Required Courses: 30 units

Course Number	Title	Units
HMSV B40	Introduction to Human Services	3.0
SOCI B1	Introduction to Sociology	3.0
SOCI B45	Minority Relations	3.0
PSYC B1a	General Psychology	3.0
PSYC B40 or CHDV B13a	Child Psychology and Development	3.0
CHDV B13a	Child Growth and Development	

Any combination of four units from the following three courses is required. Note: All units must be completed in agencies where assignment and supervision is approved by Program Director.

Course Number	Title	Units
BEHS B248ab	Cooperative Work Experience Education	1-4.0
BEHS B249ab	Cooperative Work Experience Education	1-4.0
HMSV B5	Human Services Internship	1-4.0

Electives: at least 11 units

Course Number	Title	Units
ANTH B1	Physical Anthropology	3.0
ANTH B2	Cultural Anthropology	3.0
ANTH B5	North American Indians	3.0
PSYC B1b	Biological Psychology	3.0

PSYC B5	Elementary Statistics for the Behavioral and Social Sciences	4.0
PSYC B6	Introduction to Behavioral and Social Science Research	3.0
PSYC B20 or SOCI B20	Social Psychology	3.0
PSYC B30	Human Sexuality	3.0
PSYC B31	Marriage	3.0
PSYC B33	Personal and Social Adjustment	3.0
PSYC B37	Psychology of Gender Roles	3.0
PSYC B45	Behavior Modification	3.0
SOCI B2	Problems of Modern Society	3.0
HMSV B5	Human Services Internship	1.4.0
SOCI B10	Topics in Sociology	0.5-2.0
SOCI B28	Women in the World	3.0
SOCI B36	Sociology of the Chicano	3.0
COMS B2 or COMS B50a or	Introduction to Computer Information Systems	3.0
COMS B50a or	Introduction to the Microcomputer and MS DOS (1.0)	
COMS B50a or	Any computer related course	
SPAN B1ab	Elementary Spanish	5.0
SPCH B31d	Interracial Communication	1.5
HMSV B2 or PSYC B2	Interpersonal & Group Process for the Helping Occupations	3.0
PSYC B2	Interpersonal & Group Process Skills for the Helping Occupations	
HMSV B8 or GERO B8	Introduction to Social Gerontology	3.0
GERO B8	Introduction to Social Gerontology	

COMS B2 and COMS B50 are recommended for the Human Services Program, but a maximum of 3 units of any computer-related course(s) needed for a specific career application will be accepted.

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

ANTHROPOLOGY**ANTH B1 Physical Anthropology (3 units)**

Biological evolution of man and the non-human primates with emphasis on the human fossil record. Races of modern man and human population genetics. **Recommended:** Reading Level 5 or 6, English Level 5. **Hours:** (54) 3 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN ANTH 2)

ANTH B2 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, gender, kinship and social organization, religion and culture change. **Recommended:** Reading Level 5 or 6, English Level 5. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN ANTH 4)

ANTH B5 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. **Recommended:** Reading Level 5 or 6, English Level 5. **Hours:** (54) 3 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

BEHAVIORAL SCIENCE

Credit limitations may apply. For specific information see a counselor or the transfer institution.

BEHS B5 Elementary Statistics for the Behavioral and Social Sciences (4 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:** Introductory course in Psychology, Sociology, Anthropology, Economics or Political Science (may be concurrently enrolled). **Recommended:** MATH BD or equivalent, Reading Level 5 or 6, English Level 5. **Hours:** (90) 5 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN PSY 6) **Note:** Not open to students who have taken the equivalent course, PSYC B5.

BEHS B6 Introduction to Behavioral and Social Science Research (3 units)

Emphasizes behavioral and social science research, including research design, data collection and analysis, and the development of basic computer skills. Students will collect and analyze data from experiments, questionnaires, polls and a

variety of methodologies. **Prerequisites:** PSYC B5 or MATH B22, introductory course in Psychology, Sociology, Anthropology, Economics or Political Science. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent courses, PSYC B6 or POLS B6.

BEHS B248ab Cooperative Work Experience Education (1-8 units. Limit 16 units)

See WEXP B248ab description.

BEHS B249ab Cooperative Work Experience Education (1-4 units. Limit 16 units)

See WEXP B249ab description.

GERONTOLOGY

Other Gerontology courses are listed in the Behavioral Science and Family and Consumer Education Departments

GERO B8 Introduction to Social Gerontology (3 units)

An introduction to social gerontology. Students from a variety of disciplines who work with the elderly or who have a special interest in the aging process will benefit from this course. Topics include historical and cross-cultural perspectives on aging; theories of aging; the biological, psychological, and social aspects of aging; current social and public policies; availability, delivery and use of services for the elderly; death, dying and bereavement and successful aging. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Formerly GERO B1. Not open to students who have taken either of the equivalent courses, HMSV B8 or PSYC B8.

HUMAN SERVICES

Credit limitations may apply. For specific information see a counselor or the transfer institution.

HMSV B2 Interpersonal and Group Process Skills for the Helping Occupations (3 units)

Readings and practice in skills for effective functioning in interpersonal and group settings, including active listening, interviewing, group interaction and decision making. Emphasizes the development of skills specific to human services settings, relating across differences of race, gender, ethnicity, sexual orientation, and social class in preparation for the workplace. **Recommended:** Reading Level 5 or 6, English Level 5. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, PSYC B2.

HMSV B5 Human Services Internship (1-4 units. Limit 8 units)

Study of human services organizations. Work internship under supervision in a human services field. Emphasizes

integrating theory with practical application. Participation criteria may vary among the participating human services agencies. Signature of the instructor or the Program Director is required to register for this class. **Recommended:** Reading Level 5 or 6, English Level 5. **Hours:** (72-252) 1-2 hours seminar and 3-12 hours field work per week. **Repeat:** 3 or until a maximum of 8 units is reached. **Offered:** F, S, SS. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

HMSV B8 Introduction to Social Gerontology (3 units)

An introduction to social gerontology. Students from a variety of disciplines who work with the elderly or who have a special interest in the aging process will benefit from this course. Topics include historical and cross-cultural perspectives on aging; theories of aging; the biological, psychological, and social aspects of aging; current social and public policies; availability, delivery and use of services for the elderly; death, dying and bereavement and successful aging. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Not open to students who have taken either of the equivalent courses, GERO B8 or PSYC B8.

HMSV B40 Introduction to Human Services (3 units)

Survey of helping institutions and social issues concerning human services; identification of target populations for human services applications; historical perspective of human services in the United States; theoretical perspectives of human services; survey of human services occupations; survey of careers in the human services; development of social policy concerning human services; and an overview of current controversies concerning human services; **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

HMSV B45 Minority Relations (3 units)

An examination of the relationships among dominant and minority groups, the nature of prejudice, and patterns of discrimination; the role of immigration in the creation of minority status; the role of religious difference in a pluralistic society; the relationship of minority status to economic standing; consideration on American Indians, black Americans, Chicanos, Chinese Americans, Japanese Americans, other Asian Americans, and Jewish Americans; consideration of women as an oppressed majority sharing characteristics with minorities; international problems of race, ethnicity, and poverty. **Prerequisite:** SOCI B1 or SOCI B2. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, SOCI B45.

PSYCHOLOGY

Credit limitations may apply. For specific information see a counselor or the transfer institution.

PSYC B1a General Psychology (3 units)

An introduction to the scientific study of behavior. Emphasizes 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. **Recommended:** Reading level 5 or 6, English Level 5. **Hours:** (54) 3 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN PSY 2)

PSYC B1b Biological Psychology (3 units)

An introduction to the scientific study of the biological bases for human thought and behavior. Emphasis placed on functioning of brain structures and brain chemistry in learning, memory, motivation, emotion, sensation, perception, states of consciousness, pain, and psychopathology; other areas include coverage of genetics, the nervous system and its structures and processes, stress and health, and endocrinology. Various methods of scientific inquiry will be studied, particularly experimental. Designed for psychology majors planning for upper division work in psychology. **Prerequisite:** PSYC B1A **Hours:** (54) 3 lect/disc. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PSYC B2 Interpersonal and Group Process Skills for the Helping Occupations (3 units)

Readings and practice in skills for effective functioning in interpersonal and group settings, including active listening, interviewing, group interaction and decision making. Emphasizes the development of skills specific to human services settings, relating across differences of race, gender, ethnicity, sexual orientation, and social class in preparation for the workplace. **Recommended:** Reading Level 5 or 6, English Level 5. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, HMSV B2.

PSYC B5 Elementary Statistics for the Behavioral and Social Sciences (4 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:** Introductory course in Psychology, Sociology, Anthropology, Economics or Political Science (may be concurrently enrolled). **Recommended:** MATH BD or equivalent, Reading Level 5 or 6, English Level 5. **Hours:** (90) 5 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN PSY 6) **Note:** Not open to students who have taken the equivalent course, BEHS B5.

PSYC B6 Introduction to Behavioral and Social Science Research (3 units)

Emphasizes behavioral and social science research, including research design, data collection and analysis, and the development of basic computer skills. Students will collect and analyze data from experiments, questionnaires, polls and a variety of methodologies. **Prerequisites:** PSYC B5 or MATH B22, introductory course in Psychology, Sociology, Anthropology, Economics or Political Science. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent courses, BEHS B6 or POLS B6.

PSYC B8 Introduction to Social Gerontology (3 units)

An introduction to social gerontology. Students from a variety of disciplines who work with the elderly or who have a special interest in the aging process will benefit from this course. Topics include historical and cross-cultural perspectives on aging; theories of aging; the biological, psychological, and social aspects of aging; current social and public policies; availability, delivery and use of services for the elderly; death, dying and bereavement and successful aging. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Not open to students who have taken either of the equivalent courses, GERO B8 or HMSV B8.

PSYC B20 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. **Prerequisites:** SOCI B1 or PSYC B1a. **Hours:** (54) 3 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, SOCI B20.

PSYC B30 Human Sexuality (3 units)

Basic knowledge of the human sexual system, the sexual act, today's sexual attitudes and behavior, gender identity issues, sexual health, sexual orientation, sexual problems and their treatment, sexual communication, and the legal and ethical aspects of sexuality. **Recommended:** Reading Level 5 or 6, English Level 5. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PSYC B31 Marriage (3 units)

An opportunity for students to gain knowledge about the institution of marriage, including historical aspects of marriage and family life. Major emphasis is on attitudes,

feelings, communication, and adjustment to marriage in a changing society. **Recommended:** Reading Level 5 or 6, English Level 5. **Hours:** (54) 3 lect/disc. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

PSYC B33 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. **Recommended:** PSYC B1a, Reading Level 5 or 6, English Level 5. **Hours:** (54) 3 lect. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PSYC B37 Psychology of Gender Roles (3 units)

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:** PSYC B1a. **Hours:** (54) 3 lect/discussion. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PSYC B40 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:** PSYC B1a. **Hours:** (54) 3 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PSYC B45 Behavior Modification (3 units)

Basic principles of learning theory and their application to behavioral change introduced. Operant conditioning, techniques based upon operant conditioning, classical conditioning, techniques based upon the classical conditioning model, observational learning, and techniques based upon observational learning are included. Covers a comparison of the medical/learning model of mental illness, and a unit of physiological feedback. **Prerequisite:** PSYC B1a **Hours:** (54) 3 lect/disc. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

SOCIOLOGY

Credit limitations may apply. For specific information see a counselor or the transfer institution.

SOCI B1 Introduction to Sociology (3 units)

Concentration of sociology emphasizing the scientific study of human behavior. Includes 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. **Recommended:** Reading Level 5 or 6, English Level 5. **Hours:** (54) 3 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN SOC 2)

SOCI B2 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:** Introductory course in Sociology, Psychology, or Anthropology, or evaluation by instructor. **Recommended:** Reading Level 5 or 6, English Level 5. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN SOC 4)

SOCI B10 Topics in Sociology (0.5-3 units. Limit 9 units)

Selected topics in sociology which coincide with current student interests, special guest speakers, recent developments within the field, or events and trends of importance at the community, national or global levels. **Recommended:** Reading Level 5 or 6, English Level 5. **Hours:** (9-54) 3 lect for 3-18 weeks. **Repeat:** 3 or until a maximum of 9 units is reached. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

SOCI B20 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:** SOCI B1 or PSYC B 1a. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, PSYC B20.

SOCI B28 Women in the World (3 units)

Study of women'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. **Recommended:** Reading Level 5 or 6, English Level 5. **Hours:** (54) 3 lect/disc. **CCS:**

Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

SOCI B36 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 process of assimilation, minority status, and Chicano culture. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, CHST B36.

SOCI B45 Minority Relations (3 units)

An examination of the relationships among dominant and minority groups, the nature of prejudice, and patterns of discrimination; the role of immigration in the creation of minority status; the role of religious difference in a pluralistic society; the relationship of minority status to economic standing; consideration on American Indians, black Americans, Chicanos, Chinese Americans, Japanese Americans, other Asian Americans, and Jewish Americans; consideration of women as an oppressed majority sharing characteristics with minorities; international problems of race, ethnicity, and poverty. **Prerequisite:** SOCI B1 or SOCI B2. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, HMSV B45.



Biological Sciences

Anatomy

Biology

Physiology

Students expecting to transfer to an upper division institution with a major in Biology 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.

ASSOCIATE IN SCIENCE DEGREE PROGRAM

Biology

Biology is the study and application of principles of ecology, evolution, genetics, anatomy and physiology as it relates to humans and other organisms. Laboratory and field trip activities emphasize the integrated and interdependent nature of living systems. Course work trains students to use observation and investigation to identify questions and pursue answers.

Graduates with biology degrees may pursue jobs in a variety of fields including; biochemistry, biotechnology, botany, ecology, entomology, genetics, health, immunology, medicine, molecular biology, oceanography, pharmacy, teaching, wildlife management, zoology and related clinical fields. Biology majors may choose to specialize in research based on a particular organism or an aspect of biology related to those listed above.

Candidates for an AS in Biology may select the emphasis that facilitates their interests most closely. The two areas of emphasis are General Biology and Human Biology.

Courses required for the General Biology emphasis include biology and chemistry courses necessary for transfer to 4 year institutions as a biology major, however numerous other courses as well as specialized requirements are necessary for specific institutions. Please refer to the Suggested Program information and check with a counselor concerning requirements for specific transfer institutions. Please note that some courses have prerequisites that should be taken in the appropriate order.

Courses required for the Human Biology emphasis include biology and chemistry courses necessary for transfer to allied health programs such as nursing, radiology and physician's assistant. Please refer to the Suggested Program information and check with a counselor concerning requirements for specific transfer institutions. Please note that some courses have prerequisites that should be taken in the appropriate order.

Required Courses: 18 units

Select 12 units from the following courses (emphasis in General Biology)

Course Number	Title	Units
BIOL B3a	General Biology I	5.0
BIOL B3b	General Biology II	5.0

BIOL B16	General Microbiology	5.0
BIOL B7	Environment	3.0

OR

Select 12 units from the following courses (emphasis in Human Biology)

Course Number	Title	Units
BIOL B14	Anatomy	4.0
BIOL B15	Physiology	5.0
BIOL B16	General Microbiology	5.0
BIOL B3a	General Biology I	5.0

AND

Select 6 units from the following:

Course Number	Title	Units
CHEM B15 or CHEM B2a	Principles of Inorganic Chemistry Introductory General Chemistry (5.0)	4.0
CHEM B16	Principles of Organic Chemistry & Biochemistry	3.0
CHEM B1a	General Chemistry	5.0
CHEM B1b	General Chemistry and Chemical Analysis	5.0
CHEM B8	Elementary Organic Chemistry	3.0
CHEM B9	Organic Chemistry Laboratory	3.0

Note: Students transferring to a 4 year institution for a B.S. in Biology generally take the CHEM B1a, B1b sequence. They should consult the university of their choice as to whether CHEM B8 and B9 should also be taken before transfer.

Note: Students transferring for a B.S. in Nursing should take either the CHEM B15 & CHEM B16 sequence or the CHEM 2a and CHEM B16 sequence. Consult the University of choice as to which sequence meets transfer needs.

Suggested Program

This suggested program meets all Intersegmental General Education Transfer Curriculum (IGETC) requirements. This program is a series of courses that community college students can use to satisfy lower-division general-education requirements at any California State University (CSU) or University of California (UC) campus. It will permit a student to transfer to a campus of the CSU or the UC system without the need, after transfer, to take additional lower-division general-education courses to satisfy campus general-education requirements. The program also meets or exceeds the minimum entrance requirements for most medical schools and other health professional programs. **This program assumes you are academically prepared for university-level courses. Students requiring additional preparation in mathematics, reading or English will require at least one additional semester and should consult a counselor for advice.**

First Semester

Course Number	Title	Units
BIOL B3a	General Biology I	5.0
CHEM B1a	General Chemistry	5.0

ENGL B1a	Expository Composition	4.0
	Art or Humanities Elective	3.0

Second Semester

Course Number	Title	Units
BIOL B3b	General Biology II	5.0
CHEM B1b	General Chemistry and Chemical Analysis	5.0
ENGL B2 or	Advanced Composition and Critical Thinking	5.0
PHIL B9	Critical Thinking and Composition	3.0

Third Semester

Course Number	Title	Units
MATH B6a	Analytic Geometry and Calculus I	4.0
PHYS B2a	General Physics-Mechanics and Heat	4.0
SPCH B1	Speech Communication	3.0
	Art or Humanities elective	3.0
	Social or Behavioral Science elective	3.0

Fourth Semester

Course Number	Title	Units
MATH B6b	Analytic Geometry and Calculus II	4.0
PHYS B2b	General Physics-Sound, Light, Electricity, Magnetism, Modern Physics	4.0
	Art or Humanities elective	3.0
	Social or Behavioral Science elective	3.0

Note: Some UC campuses now require calculus-based physics for biology majors. If you are planning to transfer to a UC campus, contact their admissions office for advice. If you are planning to transfer to a CSU campus, consider satisfying the art or humanities requirement by taking two courses from the following list: FREN B2, B3, B4; GERM B2, B3, B4; or SPAN B2ab, B3, B4. These courses simultaneously satisfy the CSU language other than English and the arts and humanities requirements.

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 of didactic instruction each month (12 months) thereafter. All clinical experience occurs in an office practice preceptorship. 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 18 months direct patient care experience.
4. Satisfactory completion of the following academic prerequisites or their equivalents.

General Education courses are required for the P.C.A. Program. It is recommended that an AA or AS degree at BC be completed prior to applying to the program.

The student must have a preceptor site established in order to complete the clinical experiences necessary for the program. Some assistance may be available in locating a preceptor.

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 minimum grade of "C" 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 B1/B200a at Bakersfield College.

Anatomy (BIOL B14) and Physiology (BIOL B15) 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 B15 and B16 at Bakersfield College or equivalent.

Cultural Anthropology or Sociology: ANTH B2, SOCI B1 at Bakersfield College, or another acceptable course.

English Composition - Freshman level: ENGL B1, ENBL B1a at Bakersfield College, or other acceptable course.

General Psychology - PSYC B1a at Bakersfield College or other acceptable course.

Microbiology with laboratory; BIOL B16 at Bakersfield College, or other acceptable course.

*American History and Institutions. HIST B17a and HIST B17b at Bakersfield College.

*Computer Literacy - Two semester units. Must include experience at a terminal (COMS B2 or COMS B12) 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 B1 or SPCH B2 at Bakersfield College, or other acceptable course.

*These courses are required if candidate does not possess an A.A., A.S. or higher academic degree.

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: lect lecture; lab laboratory; demo demonstration; Repeat repeatability (see policy on course repetition); CCS Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. Offered: F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

BIOLOGY

Credit limitations may apply. For specific information see a counselor or the transfer institution.

BIOL B3a General Biology I (5 units)

Introductory course for students majoring in biological sciences and related subjects. Science of life, survey of living organisms introduction to ecology and evolutionary biology, Mendelian genetics. **Prerequisite:** Reading Level 5 or 6. **Hours:** (162) 3 lect, 6 lab. Field trips required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

BIOL B3b General Biology II (5 units)

Principles of cell biology, molecular biology, metabolism, biochemistry, molecular genetics, and physiology. **Prerequisites:** CHEM B1a and BIOL B3a. **Hours:** (162) 3 lect, 6 lab.

Field trips required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

BIOL B7 Environment (3 units)

Introduction to environmental science. The process which will sustain humans on this planet. Topics included: the relevance of ecology to human affairs; historical aspects of ecological principles; population ecology; and ecology and the human future. **Prerequisite:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

BIOL B10 Plant Biology (4 units)

An introductory course covering the fundamental principles of plant biology with emphasis on structure, function, reproduction, and development of seed plants. The principles will be related to the practices of applied plant biology in agriculture, forestry, horticulture, and plant biotechnology; to ecology; and to civilization. **Prerequisite:** Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

BIOL B11 Concepts of Biology (4 units)

A non-majors introductory course which applies biological concepts to issues of everyday life. Concepts considered include scientific method; ecosystems and energy flow; organization, structure, function, behavior and evolution of organisms; inheritance; disease; ethics. **Prerequisite:** Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 demo/disc/lab per week, plus at least one field trip. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

BIOL B14 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 systems: skeletal, muscular, circulatory, respiratory, digestive, excretory, nervous, endocrine, reproductive and integumentary. **Prerequisite:** Reading Level 5 or 6. Satisfactory completion of a high school biology course with a laboratory or one semester of college biology. **Hours:** (144) 2 lect and 6 lab. **Offered:** F, S. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. (CAN BIOL 10)

BIOL B15 Human Physiology (5 units)

Introductory course in human physiology. Physiology of cells, tissues, circulation, respiration, digestion excretion, controls and reproduction. **Prerequisite:** BIOL B14, and one of the following chemistry courses: CHEM B15 or CHEM B2a or CHEM B1a. **Hours:** (162) 3 lect, 6 lab. **Offered:** F, S. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges.

BIOL B16 General Microbiology (5 units)

Introduction to the study of microorganisms. Topics include: survey of microorganisms history, physical and chemical agents, bacterial genetics, bacterial metabolism, bacterial diseases by transmission, fungal and protozoal infections, viral diseases, immunology, public health and epidemiology, nosocomial infections, biogenetic engineering, applications to food, water and sewage treatment. **Prerequisite:** CHEM B16 or CHEM B8 and CHEM B9. **Hours:** (162) 3 lect, 6 lab. Field trips required. **Offered:** F, S. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. (CAN BIOL 14).

BIOL B18 Essentials of Human 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 5 or 6. **Hours:** (108) 3 lect, 3 lab. Offered: F, S. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges.

BIOL B20 Human Biology (4 units)

An introductory biology course designed specifically for non-science majors, covering basic chemical principles of life, cell and tissue structure and function, human anatomy and physiology, health aspects, and genetics. Topics include evolution, population growth and environmental impact on humans. **Prerequisite:** Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab. Field trips required. **Offered:** F, S. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges.

BIOL B30 Introduction to Biotechnology (4 units)

An introductory biotechnology course covering basic terminology, techniques, history and future of biotechnology industries. An overview of important biological molecules, the cell, genetic and bioengineering mechanisms, gene expression and manipulations, basic laboratory skills, safety, and industrial techniques. **Prerequisite:** CHEM B1a or B2a or B15 and BIOL B10 or B11 or B20 or B3a with a grade of "C" or better. **Hours:** (108) 3 lect, 3 lab. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

BIOL B31 Applied Biotechnology (5 units)

An intermediate course in Biotechnology; topics include aseptic technique, media production, bacterial culture, nucleic acid isolation and manipulation, DNA cloning, and tissue culturing. Laboratory activities involve GLP's and safety, quality control, use of molecular biology techniques and equipment. **Prerequisite:** BIOL B30 and CHEM B16, or B8 and B9. **Hours:** (162) 3 let, 6 lab. Field trips required. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

BIOL B51 Biotechnology Careers (0.5 unit)

Introduces the student to biotechnology skills, products, and career opportunities. Field trips and guest speakers are an integral part of the program. Hours: (9) 1 lect for 9 weeks. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BIOL B52 Advanced Biotechnology (4 units)

An advanced course in Biotechnology. Topics will stress biotechnician training and independent lab skills. Lecture topics will include transformation, restriction analysis of DNA, immunological applications. Lab will emphasize practice and mastery of current techniques including teamwork, design of an original project, assembly of necessary components, collection of data, evaluation and defense of findings. **Prerequisites:** BIOL B31 and CHEM B16 or CHEM B8 and B9 with a grade of "C" or better. Hours: (144) 2 lect, 6 lab. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BIOL B53 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. Recommended: Reading Level 4. **Hours:** (72) 2 lect, 1 lab, 1 disc. Field trips required. **Offered:** F, S. **CCS:** Precollegiate - discipline specific. **Not Transferable:** Not degree applicable. **Note:** Not open for credit to students who have already completed BIOL B3a, BIOL B11, PHYL B1 or high school biology with a grade of "B."

BIOL B248ab Cooperative Work Experience Education (1-8 units. Limit 16 units)

See WEXP B248ab description.

BIOL B249ab Cooperative Work Experience Education (1-4 units. Limit 16 units)

See WEXP B249ab description.

Business Education

Accounting

Business

Business Administration

Management

Marketing

Office Technology

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.

General Office Certificate of Completion

Required Courses: 14.5 units

Course Number	Title	Units
BUS B5	Human Relations and Motivation	3.0
BUS B64	Ten-Key Proficiency	1.0
BUS B90	Job Readiness	3.0
OFFT B75/B275	English for Careers: Business-Professional-Technical	3.0
OFFT B252ab	Computer Keyboarding, Beginning, Part 1-2	2.0
OFFT B257	Filing	1.5
WEXP B248	Cooperative Work Experience Education	1.0

General Sales Certificate of Completion

Required Courses: 17 units

Course Number	Title	Units
BUS B51	Business Mathematics	3.0
BUS B5	Human Relations and Motivation	3.0
BUS B90	Job Readiness	3.0
OFFT B75/275	English for Careers: Business-Professional-Technical	3.0
MKTG B62	Fundamentals of Personal Selling	3.0
OFFT B252a	Computer Keyboarding, Beginning, Part 1	1.0
WEXP B248	Cooperative Work Experience Education	1.0

General Management Certificate of Completion

Upon completion of the following courses with at least a "C" grade in each course, the student will be awarded a General Management Certificate of Completion. This Certificate will provide the graduate with key management and supervisory skills and has proven to be valuable in developing high-quality supervisors and managers.

Required Courses: 17.5 units

Sequence for Fall Semester - 9 units

Course Number	Title	Units
MGMT B61	Human Resources Management	1.5
MGMT B60	Supervisory Training	2.0
MGMT B71	Leadership in Management	1.0
MGMT B65a	Basic Principles of English for Business/Public Organizations	1.0
MGMT B65b	Principles of Writing for Business/Public	1.0
MGMT B65c	Organizational Communication	1.0
MGMT B62	Ethics in the Workplace	1.5

Sequence for Spring Semester - 8.5 units

Course Number	Title	Units
BUS B5	Human Relations and Motivation	3.0
MGMT B75	Managing Cultural Diversity in the Workplace	3.0
MGMT B54	Teams in the Workplace	1.5
MGMT B66	Case Studies in Management	1.0

Small Business Certificate of Completion

This certificate is designed for students wishing to start or improve a small business. The certificate is issued by Bakersfield College Business and Public Administration Division and the Small Business Development Center upon completion of the following courses with at least a "C" grade in each course.

Required Courses: 12 units

Course Number	Title	Units
SMBS B54	How to Start Your Own Small Business	1.5
SMBS B55	Financing a Small Business	0.5
SMBS B56	Marketing a Small Business	1.5
SMBS B60	How to Use a Bookkeeping System	2.0
SMBS B63	Insuring a Small Business	0.5
SMBS B71	How to Project and Improve Cash Flow	0.5
SMBS B72	Understanding Taxes	0.5
SMBS B74	How to Manage Credit and Collections	0.5
MGMT B60	Supervisory Training	2.0
MGMT B70L	The Stress/Work Connection	0.5

Electives: at least 2 units

Course Number	Title	Units
MGMT B54	Teams in the Workplace	1.5
MGMT B61	Human Resources Management	1.5
MGMT B70e	Marketing	0.5
BUS B B80c	Accounting for Home-Based Businesses	0.5
OFFT B80b	Doing Business on the Internet	0.5

Bookkeeping Certificate of Achievement

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: 24 units

Course Number	Title	Units
ACCT B53a/B253a	Introduction to Accounting 1	3.0
ACCT B53b/B253b	Introduction to Accounting 2	3.0
ACCT B54	Payroll Accounting	3.0
ACCT B56	Excel for Accounting	1.0
BSAD B10	Accounting on the Microcomputer	3.0
BUS B253 or	Business Mathematics on Electronic Calculators	4.0
BUS B51/B251	Business Mathematics (3.0)	
BUS B64/B264	Ten-Key Proficiency (1.0)	
MGMT B65b	Principles of Writing for Business/Public Organizations	1.0
OFFT B52ac/B252ac	Computer Keyboarding, Part 1-2-3	3.0
OFFT B75/B275	English for Careers: Business - Professional - Technical	3.0

Electives

Course Number	Title	Units
BUS B40	Personal Finance	3.0
BUS B5	Human Relations and Motivation	3.0
BUS B80c	Accounting for Homebased Businesses	0.5
OFFT B80a	Technology Applications for the Office	0.5
OFFT B80b	Doing Business on the Internet	0.5
COMS B62b	Intermediate Spreadsheets with Excel	1.0
COMS B5	Introduction to Microcomputer Applications	3.0
BUS B248ab or BUS B249ab	Cooperative Work Experience Education	1-4.0

California Real Estate Certificate of Achievement

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

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

Required Courses: 24 units

(Should be taken in listed order)

Course Number	Title	Units
REAL B39	Principles of Real Estate	3.0
REAL B60 or BSAD B18a	Legal Aspects of Real Estate Business Law	3.0
REAL B61 or BSAD B1a or ACCT B53a/ B253a	Real Estate Economics Financial Accounting Introduction to Accounting (3.0)	3.0
REAL B62	Real Estate Finance	3.0
REAL B63	Real Estate Appraisal	3.0
REAL B64	Real Estate Practice	3.0

Electives: at least 6 units

Course Number	Title	Units
REAL B55	Escrow Procedures	3.0
REAL B65	Real Estate Investment and Taxation	3.0
REAL B68	Advanced Real Estate Appraisal	3.0
REAL B266	Real Estate Mathematics	2.0
COMS B2	Introduction to Computer Information Systems	3.0
MKTG B62	Fundamentals of Personal Selling	3.0
MGMT B43	Principles of Management	3.0
REAL B57	Property Management	3.0
BUS B248ab or BUS B249ab	Cooperative Work Experience Education	1-4.0

General Business Certificate of Achievement

A Certificate of Achievement in General Business will provide the student with broadly based knowledge and skills in the field of business. This foundation can be built into many successful careers in business upon completion of the following courses with at least a grade of “C.”

Required Courses: 24 units

Course Number	Title	Units
OFFT B75/B275	English for Careers: Business - Professional-Technical	3.0
BUS B53/B253	Business Mathematics on Electronic Calculators	4.0
BUS B5	Human Relations and Motivation	3.0
BSAD B20	Introduction to Business	3.0
BUS B40	Personal Finance	3.0
OFFT B252a	Beginning Keyboarding, Part 1	1.0

Electives: at least 7 units

Course Number	Title	Units
ACCT B53a/B253a	Introduction to Accounting 1	3.0
OFFT B65	Windows for Business	1.0
MKTG B1	Fundamentals of Marketing	3.0
MGMT B43	Principles of Management	3.0
MGMT B75	Managing Cultural Diversity in the Workplace	3.0
BSAD B18a	Business Law	3.0
ECON B1	Principles of Economics-Micro	3.0
OFFT B80a	Technology Applications for the Office	0.5

Marketing Certificate of Achievement

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

Required Courses: 24 units

Course Number	Title	Units
BSAD B20	Introduction to Business	3.0
MKTG B1	Introduction to Marketing	3.0
BUS B51/B251	Business Mathematics	3.0
OFFT B75/B275 or ENGL B1	English for Careers: Business-Professional-Technical Introductory Composition (4)	3.0
MKTG B53a	Fundamentals of Retailing	3.0
MKTG B62	Fundamentals of Selling	3.0

Electives: at least 5 or 6 units

Course Number	Title	Units
MGMT B65b	Principles of Writing for Business/Public Organizations	1.0
BUS B50a	Principles of Technical Writing	1.5
BUS B50b	Applications of Technical Writing	1.5
BUS B5	Human Relations and Motivation	3.0
ACCT B53a/B253a	Introduction to Accounting I	3.0
MGMT B43	Principles of Management	3.0
COMS B5	Introduction to Microcomputer Applications	3.0
BUS B248ab or BUS B249ab	Cooperative Work Experience Education	1.0-4.0

Office Assistant I Certificate of Achievement

Upon completion of the following courses with at least a “C” grade in each course, the student will be awarded an Office Assistant I Certificate of Completion. This certificate prepares students as entry-level office support staff. Students are urged to continue beyond this Completion Certificate and earn a Certificate of Achievement or Associate of Arts Degree.

Required Courses: 20.5 units

Course Number	Title	Units
OFFT B252abc	Computer Keyboarding, Beginning, Part 1-2-3	3.0
OFFT B257	Filing	1.5
COMS B57abc	Microsoft Word for Windows	3.0
OFFT B75/B275	English for Careers: Business-Professional-Technical	3.0
BUS B53/B253	Business Mathematics on the Electronic Calculators	4.0
COMS B5 or COMS B62a & COMS B68a & COMS B70a	Introduction to Microcomputer Operations Introduction to Spreadsheets with Excel (1.0) Introduction to Microsoft Access (1.0) Introduction to Electronic Presentation with Microsoft Powerpoint (1.0)	3.0
BUS B5	Human Relations and Motivation	3.0

Office Assistant II Certificate of Achievement

An Office Assistant II Certificate of Achievement increases the student’s employability as office support staff. Students who have completed the Certificate of Completion courses can quickly upgrade to the Certificate of Achievement by completing the following courses with at least a “C” grade.

Required Courses: 29 units

Course Number	Title	Units
OFFT B252abc	Computer Keyboarding, Beginning, Parts 1-2-3	3.0
OFFT B257	Filing	1.5
COMS B57abc	Microsoft Word for Windows	3.0
OFFT B75/B275	English for Careers: Business-Professional-Technical	3.0
BUS B53/B253	Business Mathematics on the Electronic Calculators	4.0
COMS B5 or COMS B62a & COMS B68a & COMS B70a	Introduction to Microcomputer Operations Introduction to Spreadsheets with Excel (1.0) Introduction to Microsoft Access (1.0) Introduction to Electronic Presentation with Microsoft Powerpoint (1.0)	3.0
BUS B5	Human Relations and Motivation	3.0
OFFT B253abc	Document Processing Using Word, Part 1-2-3	3.0
OFFT B280	Machine Transcription	1.5
OFFT B78	Office Procedures	3.0
WEXP B248ab or WEXP B249ab	Cooperative Work Experience	1.0

Retail Management Certificate of Achievement

A Certificate of Achievement in Retail Management is designed to prepare students for entry-level employment. The Certificate will provide the student with broadly based knowledge and skills in retail stores including grocery chains. This foundation can be built into many successful careers. The certificate is recognized by members of the Western Association of Food Chains, all the major supermarket chains in the western 13 states

Required Courses: 30 or 31 units

Sequence I

Course Number	Title	Units
BUS B3	Business Communications	3.0
MGMT B65a	Basic Principles of English for Business/Public Organizations	1.0
MGMT B65b	Principles of Writing for Business/Public Organizations	1.0
MGMT B65c	Organizational Communications	1.0
BUS B51/251	Business Mathematics	3.0
COMS B5	Introduction to Microcomputer Applications	3.0

Sequence II

Course Number	Title	Units
MKTG B1	Fundamentals of Marketing	3.0
MGMT B43	Principles of Management	3.0
ACCT B53a or BSAD B1a	Introduction to Accounting 1 Financial Accounting (4.0)	3.0

Sequence III

Course Number	Title	Units
MKTG B53a	Fundamentals of Retailing	3.0
BUS B5	Human Relations and Motivation	3.0
MGMT B41	Advanced Human Resources Management	1.5
MGMT B61	Human Resources Management	1.5

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.

Accounting

Required Courses: 28 units

Course Number	Title	Units
ACCT B53a/253a	Introduction to Accounting 1	3.0
ACCT B53b/253b	Introduction to Accounting 2	3.0
ACCT B54	Payroll Accounting	3.0
BSAD B10	Accounting on the Microcomputer	3.0
BUS B40	Personal Finance	3.0
BUS B53/253	Business Mathematics on Electronic Calculators	4.0
BSAD B18a	Business Law	3.0
BUS B5	Human Relations and Motivation	3.0
COMS B5	Introduction to Microcomputer Applications	3.0

Note: BSAD B1a may be substituted for ACCT B53a or B253a and ACCT B53b or B253b.

Administrative Office Assistant

Designed to prepare the student for employment as office support staff to assist managers, executives, and professionals.

Required Courses: 30.5 units

Course Number	Title	Units
OFFT B252abc	Computer Keyboarding, Beginning, Parts 1-2-3	3.0
OFFT B253abc	Document Processing Using Word, Parts 1-2-3	3.0
OFFT B257	Filing	1.5
OFFT B75/B275	English for Careers: Business-Professional-Technical	3.0
OFFT B78	Office Procedures	3.0
OFFT B280	Machine Transcription	1.5
BUS B3	Business Communications	3.0
BUS B5	Human Relations and Motivation	3.0
COMS B5 or COMS B51a &	Introduction to Microcomputer Applications and MS Windows (1.0)	3.0
COMS B62a & COMS B68a & COMS B70a	Introduction to Spreadsheets with Excel (1.0) Introduction to Microsoft Access (1.0) Introduction to Electronic Presentations with MS Powerpoint (1.0)	3.0
COMS B73	Introduction to the Internet	1.0
ACCT B53a/B253a	Introduction to Accounting I	3.0
MGMT B62	Ethics in the Workplace	1.5

Electives

Course Number	Title	Units
MGMT B65b	Principles of Writing for Business/Public Organizations	1.0
BUS B53/B253	Business Mathematics on Electronic Calculators	4.0
BSAD B18a	Business Law	3.0
BSAD B10	Accounting on the Microcomputer	3.0
BSAD B20	Introduction to Business	3.0
WEXP B248ab or WEXP B249ab	Cooperative Work Experience Education	1-4.0

Business Administration

The general purpose of the program in Business Administration at the university and state college is twofold. First, it is 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, it offers 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: 26 units

Course Number	Title	Units
BSAD B1a	Financial Accounting	4.0
BSAD B1b	Managerial Accounting	4.0
COMS B2 or COMS B5	Introduction to Computer Information Systems Introduction to Microcomputer Applications	3.0
ECON B1	Principles of Economics-Micro	3.0
ECON B2	Principles of Economics-Macro	3.0
MATH B2	Basic Functions and Calculus for Business	4.0
MATH B22	Elementary Probability and Statistics	5.0

Electives

Course Number	Title	Units
BSAD B18a	Business Law	3.0
BSAD B19	Business Law	1.0
BSAD B10	Accounting on the Microcomputer	3.0
BUS B5	Human Relations and Motivation	3.0
BUS B248	Cooperative Work Experience Education	1-4.0
BUS B249	Cooperative Work Experience Education	1-4.0

Marketing

Required Courses: 24 units

Course Number	Title	Units
BSAD B20	Introduction to Business	3.0
MKTG B1	Introduction to Marketing	3.0
MKTG B53a	Fundamentals of Retailing	3.0
MKTG B62	Fundamentals of Selling	3.0
BUS B51/B251	Business Mathematics	3.0
ACCT B53a/B253a	Introduction to Accounting 1	3.0
ACCT B53b/B253b	Introduction to Accounting 2	3.0

Electives: at least 3 units

Course Number	Title	Units
BUS B5	Human Relations and Motivation	3.0
MGMT B43	Principles of Management	3.0
COMS B2 or COMS B5	Introduction to Computer Information Systems Introduction to Microcomputer Applications	3.0
BUS B248ab or BUS B249ab	Cooperative Work Experience Education	1-4.0

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the depart-

ment for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California

ACCOUNTING

ACCT B53a 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. **Recommended:** Reading Level 5 or 6, BUS B53/B253. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent course, ACCT B253a.

ACCT B53b 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:** ACCT B53a/B253a. **Hours:** (54) 3 lect. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent course, ACCT B253b.

ACCT B54 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:** ACCT B53a/B253a. **Hours:** (54) 3 lect. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

ACCT B57 Federal and California Income Taxation (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. **Prerequisites:** ACCT B53a/B253a or ACCT B53b/B253b or BSAD B1a or equivalent. **Hours:** (72) 4 lect. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

ACCT B58 Individual Income Tax Preparation (2 units)

Acquaints students with vocabulary, regulations, documents that will enable them to prepare individual federal income tax returns. **Hours:** (36) 3 lect for 6 weeks. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

ACCT B253a 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. **Recommended:** Reading Level 5 or 6, BUS B53/B253 (may be taken concurrently). **Hours:** (54) 3 hours individualized instruction and supervised lab. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent course, ACCT B53a.

ACCT B253b 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:** ACCT B53a/B253a. **Hours:** (54) 3 hours individualized instruction and supervised lab. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent course, ACCT B53b.

BUSINESS

Credit limitations may apply. For specific information see a counselor or the transfer institution.

BUS B3 Business Communications (3 units)

An introduction to organizational communication. Instruction in group communication, listening, conflict resolution, leadership, employee phases and interviewing. Emphasizes understanding of communication in the work place and related group processes. **Recommended:** English Level 6, Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, SPCH B3.

BUS B5 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. **Recom-**

mended: Reading Level 5 or 6. **Hours:** (54) 3 lect/disc.
Offered: F, S. **CCS:** Occupational Education. **Transferable:** CSU Bakersfield.

BUS B40 Personal Finance (3 units)

Principles and skills of budgeting, making intelligent consumer choices related to consumer credit, banking services, insurance, taxes, transportation, investing for personal retirement, and real estate planning. **Hours:** (54) 3 lect.
Offered: F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

BUS B50a Principles of Technical Writing (1.5 units)

Technical writing principles for the workplace such as analyzing audience, organizing, designing and revising documents. Emphasis on preparing employment documents including the resume and letter of application. **Recommended:** Reading Level 5 or 6. **Hours:** (27) 3 lect for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BUS B50b Applications of Technical Writing (1.5 units)

Practical application of various written communications needed on the job. In addition to basic letters and memos, experience in writing specialized material such as descriptions, definitions, instructions, proposals, progress and investigative reports. Emphasizes situation analysis and student initiative to solve realistic technical writing problems. **Recommended:** Reading Level 5 or 6. **Hours:** (27) 3 lect for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BUS B51 Business Mathematics (3 units)

Basic arithmetic skills reviewed and applied to the solution of business problems. 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. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent courses, BUS B53 or BUS B251, B253.

BUS B53 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. **Recommended:** MATH B50 or equivalent and Reading Level 5 or 6. **Hours:** (90) 5 lect/demo. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent courses, BUS B51, B251 or B253.

BUS B54 Introduction to International Business (3 units)

A comprehensive overview of international business designed to provide a global perspective on international trade including foreign investments, impact of financial markets, international marketing, and the operation of multinational corporations. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BUS B55 International Management (3 units)

An introduction to international management principles with an overview of exporting companies, multinational and global organizations, international law, international human resource issues, operational issues, marketing decisions, strategic planning and competitiveness, and cross cultural issues. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BUS B56a Introduction to Exporting (1 unit)

Exporting, vocabulary, acronyms, regulations, documentation and sources of information. **Hours:** (18) 3 lect for 6 weeks. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BUS B56b Introduction to Importing (1 unit)

Importing, vocabulary, acronyms, regulations, documentation and sources of information. **Hours:** (18) 3 lect for 6 weeks. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BUS B57a Doing Business in the Hispanic Culture (1 unit)

Overview of the effects of culture on communication, interaction and doing business. Cultural roles, manners, customs in the Spanish culture as compared to U.S. culture. **Hours:** (18) 3 lect. for 6 weeks. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BUS B57b Doing Business in the Asian Culture (1 unit)

Overview of the effects of culture on communication, interaction and doing business. Cultural roles, manners, customs in the Asian culture as compared to U.S. culture. **Hours:** (18) 3 lect for 6 weeks. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BUS B61 Electronic Commerce (1 unit)

This course introduces students to E-commerce basics. Emphasis is placed on exploring marketing issues, payment processing, collections, security, and customer service. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 3 lect for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BUS B64 Ten-Key Proficiency (1 unit)

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. **Recommended:** Reading Level 2. **Hours:** (30) 5 hours lect for 6 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent courses, BUS B53, B253 or B264.

BUS B73 Introduction to Investments (3 units)

An introduction to the principles of investments and money management with an in-depth survey of the stock market. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BUS B80 Topics in Business Administration (0.5 unit)

Special business topics of interest and concern, including recent developments in the field. **Hours:** (9) 3 lect for 3 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BUS B80a IRA Management**BUS B80b Developing a Budget****BUS B80c Accounting for Home-based Businesses****BUS B85 Virtual Enterprise (3 units)**

Designed to give students a world-class business experience in e-commerce through the use of a "simulated company." Students will act as employees of a simulated company dealing with real life business problems in an authentic office setting using the latest equipment and communication technology. The company will function within a network of national and international simulated companies. **Hours:** (108) 6 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BUS B90 Job Readiness (3 units)

Assisting students to develop appropriate skills for working in a business setting. Skills include communication, team building, job search, and technical business applications. **Hours:** (120) 10 lab for 12 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BUS B95 Virtual Enterprise Summer Institute (2 units)

Provide background and skills necessary for college and high school students to successfully conduct a global business which primarily operates on the internet. **Recommended:** Reading Level 5 or 6. **Hours:** (60) 7 lect, 3 lab for 6 weeks. **Offered:** SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BUS B248ab Cooperative Work Experience Education (1-8 units. Limit 16 units)

See WEXP B248ab description.

BUS B249ab Cooperative Work Experience Education (1-4 units. Limit 16 units)

See WEXP B249ab description.

BUS B251 Business Mathematics (3 units)

Basic arithmetic skills reviewed and applied to the solution of business problems. 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. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 hours individualized instruction or supervised lab. Open entry/open exit. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent courses, BUS B51, BUS B53 or BUS B253.

BUS B252a Quick Computer Keyboarding for Survival (1 unit)

Individualized typewriting instruction includes (1) learning the keyboard by touch, (2) all operational parts of the keyboard, and (3) horizontal and vertical centering. **Recommended:** Reading Level 5 or 6; English Level 5. **Hours:** (30) 5 hours per week for 6 weeks, individualized instruction and supervised lab. Open entry/open exit. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent courses, OFFT B52a or OFFT B252a.

BUS B253 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. **Recommended:** MATH B50 or equivalent and Reading Level 5 or 6. **Hours:** (90) 5 hours individualized instruction and supervised lab. Open entry/open exit. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to

students who have taken the equivalent courses, BUS B51, B53 or BUS B251.

BUS B264 Ten-Key Proficiency (1 unit)

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.

Recommended: Reading Level 4. **Hours:** (30) 5 hours lect for 6 weeks. **Offered:** F, S. **CCS:** Occupational Education.

Not Transferable: Associate Degree only. **Note:** Not open to students who have taken the equivalent courses, BUS B53, B253 or B64.

BUSINESS ADMINISTRATION

Credit limitations may apply. For specific information see a counselor or the transfer institution.

BSAD B1a Financial Accounting (4 units)

Introduction to accounting theory and practice. 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. **Prerequisite:** Math BD and Reading Level 5 or 6. **Hours:** (72) 4 lect. **Offered:** F, S.

CCS: Occupational Education. **Transferable:** UC, CSU and private colleges. (CAN BUS 2) (BSAD B1a + BSAD B1b = CAN BUS SEQ A)

BSAD B1b Managerial Accounting (4 units)

With a strong emphasis on decision-making, the use of accounting information and tools for strategic planning. Measurement and reporting performance for management decisions. Product costing using activity based costing, process and job order systems. Cost-volume-profit, budget, variance and capital investment analysis. **Prerequisite:** BSAD B1a. **Hours:** (72) 4 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges. (CAN BUS 4) (BSAD B1a + BSAD B1b = CAN BUS SEQ A).

BSAD B10 Accounting on the Microcomputer (3 units)

Review and practical application of accounting principles, electronic spreadsheets, word processing and data management as they pertain to solution of accounting problems and situations on a microcomputer. Emphasizes analysis of problems and student initiative to solve the problems presented using computerized software available. **Prerequisite:** ACCT B53a/b or BSAD B1a or equivalent. Prior familiarity with, and knowledge of, computers. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

BSAD B18a Business Law (3 units)

Rules of law as they relate to business transactions. Origins of American legal system. Accountant/client relationship and the law of agency and professional and business ethics. Definition and classification of law. Court systems and procedure. Law of contracts: essentials of enforceable agreements, operation and discharge. Creation of relationship, rights and liabilities of parties and termination of relationship uniform commercial code of sales. Law of negotiable instruments: essentials of negotiability, negotiation and discharge. Law of property, personal property, acquisition, constitutional law, legislative, executive, judicial and administrative law. International business. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

BSAD B19 Business Law (1 unit)

Business organizations: sole ownership, partnerships and corporations. Wills and trusts. Business students transferring to CSUB are advised to take this course in addition to BSAD B 18a to match CSUB's ACC 275. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 1 lect. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

BSAD B20 Introduction to Business (3 units)

Introduction to 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. Satisfies the 0.5 unit educational planning requirement for graduation from Bakersfield College. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

MANAGEMENT

Credit limitations may apply. For specific information see a counselor or the transfer institution.

MGMT B41 Advanced Human Resources Management (1.5 units)

Provides additional training in human resources management planning, financing, performance appraisal, promotions and dismissal, and health issues. **Recommended:** Reading Level 5 or 6. **Hours:** (27) 3 lect/disc. for 9 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Elective credit only.

MGMT B43 Principles of Management (3 units)

A study of formal organizations, the organizational environment and organizational planning and control. Topics include the nature of complex organizations, decision-making, small group studies and individual behavior. Also included are planning theory, systems management, and non-formal behavior. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

MGMT B48 Small Business Management (3 units)

Provides aspiring entrepreneurs and persons involved in small business ventures with the tools for achieving success in small business operations by analyzing opportunities for business start ups, buyouts, franchising and family business. Instruction for preparing a business plan, marketing plan, social and ethical responsibility, customer orientation and service, cash flow and cash management, international business opportunities, tax issues, computer software and legal aspects of doing business. **Recommended:** Reading Level 5 or 6 or evaluation by instructor. **Hours:** (51) Contact Time. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

MGMT B50 Managing Quality Organizations (3 units)

Incorporates the systematic approach to constant improvement throughout an organization. Introduces themes, teams, tools/techniques of continuous quality improvement. Emphasizes the quality systems approach to: customer focus; and employee involvement in service, retail and manufacturing situations. **Hours:** (54) 3 lect. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent course, INDT B50.

MGMT B51a-B51b-B51c Introduction to Logistics; Elements of Physical Distribution; Physical Distribution Analysis (1-1-1 units)

The process of planning, implementing and controlling the efficient, effective flow and storage of goods, and related information, from point of origin to point of consumption in accordance with customer requirements. Where possible, corporate operations will be integrated with text material. Logistics management is an essential element in organizations that handle the flow and storage of goods. **Hours:** (18 each) 3 lect for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MGMT B52 Transportation and Traffic Management (1 unit)

Procurement and use of transportation services and the operation of transportation activities as related to a firm's logistical mission from a managerial and operation viewpoint. Provides the student with deeper understanding of the methods and tools used by today's logistics, traffic and carrier managers. **Hours:** (18) 3 lect for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MGMT B53 Material Handling (1 unit)

Physical handling and packaging of products and materials presented from a managerial and operational viewpoint. Provides the student with a deeper understanding of the material handling methods and tools used by today's warehouse managers. **Hours:** (18) 3 lect for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MGMT B54 Teams in the Workplace (1.5 units)

Team approach to organizational improvement. Introduces formation, role and future of teams in service, retail and manufacturing situations. **Hours:** (27) 4.5 lect. for 6 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MGMT B55 Project Management Training (3 units)

Program coordination skills; budget oversight, staff hiring, evaluation, program development and evaluation. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MGMT B60 Supervisory Training (2 units)

Provides prospective as well as existing supervisors with current techniques and skills required in today's businesses both profit and non-profit. Encourages an understanding of human relations skills, team and coaching skills as well as human resource management and employee motivation. Covers basic through advanced key elements of planning, organizing, staffing, leading and controlling. Appropriate for those currently in supervisory roles as well as those interested in such positions. **Recommended:** Reading Level 5 or 6. **Hours:** (36) 3 lect/disc for 12 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MGMT B61 Human Resources Management (1.5 units)

Comprehensive review of basic personnel management. Emphasizes concepts and techniques including recruitment and placement, training and development, compensation and motivation, performance appraisals, the legal environment of personnel. **Recommended:** Reading Level 5 or 6. **Hours:** (27) 3 lect/disc for 9 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MGMT B62 Ethics in the Workplace (1.5 units)

Overview of decision making in a business environment, social responsibility, and moral philosophies to provide managers and anyone working in a business environment with a framework to identify, analyze and understand ethical issues and how business people make ethical decisions. Topics include: development of accountability, moral philosophies, current ethical case reviews, decision-making frameworks, the environment, organizational structure and culture, significant others in the organization, the roles of opportunity and conflict, controlling ethics, and the growing need and role of international business ethics in today's society. **Recommended:** Reading Level 5 or 6. **Hours:** (27) 3 lect for 9 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MGMT B65a Basic Principles of English for Business/Public Organizations (1 unit)

Examination of basic principles of English as they apply to today's business office. Emphasis is on correct English usage

for everyday routine situations. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 3 lect/disc for 6 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MGMT B65b Principles of Writing for Business/Public Organizations (1 unit)

Examination of basic techniques involved in writing business letters, memos, and reports. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 3 lect/disc for 6 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MGMT B65c Organizational Communications (1 unit)

Processes of human behavior and communication within the organizational context. Discussion topics include: role of communication in organizations, communication styles, relationship between verbal and nonverbal behaviors, barriers to effective communication, identification of channels of communication within organizations, small-group communication, conflict and communication. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 3 lect/disc for 6 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MGMT B66 Case Studies in Management (1 unit)

Advanced knowledge and skills in solving managerial problems. Using the case method, discussions will cover a variety of topics. This is the last course of the General Management Certificate. May be taken concurrently with other courses in the sequence. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 3 lect/disc for 6 weeks. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MGMT B71 Leadership in Management (1 unit)

Leadership training with emphasis on student participation using practical class projects. Defines, discusses problems of and preparation for leadership. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 3 lect/disc for 6 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MGMT B72 Introduction to Management (0.5 units)

Basic concepts, theories, and practices. A practical orientation focusing on what managers do, how they do it, and what factors determine whether or not they will be successful. **Recommended:** Reading Level 5 or 6. **Hours:** (9) 3 lect/disc for 3 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MGMT B73 Improving Productivity at Work: Employee Performance and Motivation (1.5 units)

Review of the most effective behavioral management tools used to improve productivity while keeping costs to a minimum. **Recommended:** Reading Level 5 or 6. **Hours:**

(27) 3 lect/disc for 9 weeks. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MGMT B75 Managing Cultural Diversity in the Workplace (3 units)

Effective global management skills which are needed to benefit from an expanding international market, improve business communication with foreign nationals and minorities, master the art of business protocol and cross-cultural courtesy; multicultural diversity occurring in the workplace; providing services to a multicultural population. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. NOTE: Not open to students who have taken the equivalent course, ADMJ B75.

MGMT B76 Management of Change and Conflict (1.5 units)

Basic techniques and skills for producing and responding to change. Topics include how to diagnose both the behavioral problems of an individual and the organizational needs. **Recommended:** Reading Level 5 or 6. **Hours:** (27) 3 lect/disc for 9 weeks. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MGMT B77 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. **Recommended:** Reading Level 5 or 6. **Hours:** (27) 3 lect/disc for 9 weeks. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MARKETING

Credit limitations may apply. For specific information see a counselor or the transfer institution.

MKTG B1 Fundamentals of Marketing (3 units)

Basic key concepts and issues underlying the modern practice of marketing. Surveys the marketing concept, marketing research, buyer behavior, and environmental constraints. It is recommended that this course be taken in the third or fourth semester at Bakersfield College before transferring. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

MKTG B53a Fundamentals of Retailing (3 units)

Examination of opportunities in the field of goods and services and their allied occupations. Topics include: obtaining a job and keeping it, personality development, selling, merchandising, promotions, merchandise analysis, store mathematics, effective oral expression, and human relations. Business community is used as a laboratory to illustrate the

latest methods and techniques. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. Field trip required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MKTG B62 Fundamentals of Personal Selling (3 units)

Fundamental principles of creative selling. Topics include: prospecting, the approach, methods of presentation and demonstration, marketing, meeting objections, the close and follow-up. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

MKTG B72 Customer Service (1 unit)

Introduction to basic customer service, telephone and sales skills that will enable the student to join the workforce in at least entry level capacity. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 18 lab for 3 weeks. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

OFFICE TECHNOLOGY

OFFT B52ac Computer Keyboarding, Beginning Part 1-2-3 (3 units)

Develops the keyboard by touch and a knowledge of all operational parts of the typewriter. Instruction in centering, letter placement, simple tabulation, reports, rough drafts, forms, proofreading and error correction. **Recommended:** English Level 4, Reading Level 5 or 6. **Hours:** (90) 4 lect, 1 lab. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent course, OFFT B252ac.

OFFT B75 English for Business-Professional-Technical (3 units)

Basic English usage including punctuation, capitalization, number usage, plurals, possessives, and grammar. **Recommended:** English Level 5 eligibility, Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent course, OFFT B275.

OFFT B78 Office Procedures (3 units)

A finishing course for those completing their training for an office career. Includes job attitudes, time management, document preparation, office technology, telephone techniques, processing mail, travel arrangements, keeping appointment calendars, arranging meetings, banking services, the job application process and interviewing techniques. **Recommended:** Reading Level 5 or 6, English Level 5. **Hours:** (54) 3 lect/disc. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

OFFT B80 Topics in Office Technology (0.5-1 unit)

Special topics on office technology of interest and concern, including recent developments in the field. **Hours:** (9-18) 3 lect for 3-6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

OFFT B80a Technology Applications for the Office (0.5 unit)

OFFT B80b Doing Business on the Internet (0.5 unit)

OFFT B252a Computer Keyboarding, Beginning, Part 1 (1 unit)

Individualized typewriting instruction includes (1) learning the keyboard by touch, (2) all operational parts of the typewriter, and (3) horizontal and vertical centering. **Recommended:** Reading Level 5 or 6; English Level 5. **Hours:** (30) 5 hours per week for 6 weeks, individualized instruction and supervised lab. Open entry/open exit. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent courses, OFFT B52a or BUS B252a.

OFFT B252b Computer Keyboarding, Beginning, Part 2 (1 unit)

Individualized typewriting instruction includes (1) developing typing speed and accuracy, (2) instruction in correcting typographical errors, (3) word division rules, and (4) correct formatting of reports, tables, and business letters. **Prerequisite:** OFFT B252a with a grade of "C." **Recommended:** English Level 4, Reading Level 5 or 6. **Hours:** (30) 5 hours per week for 6 weeks, individualized instruction and supervised lab. Open entry/open exit. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent course, OFFT B52b.

OFFT B252c Computer Keyboarding, Beginning, Part 3 (1 unit)

Individualized typewriting instruction includes (1) developing typing speed and accuracy, (2) instruction in correct formatting of memorandums, post cards, envelopes, printed forms, and reports. **Prerequisite:** OFFT B252b with a grade of "C." **Hours:** (30) 5 hours per week for 6 weeks, individualized instruction and supervised lab. Open entry/open exit. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent course, OFFT B52ac.

OFFT B253abc Document Processing Using Word, Part 1-2-3 (1-1-1 unit)

Further develops keyboarding speed, accuracy, and production rates on letters, reports, tables, forms, rough drafts, and other documents created in the business office. Emphasis is on "mailable copy" including proper formatting, proofread-

ing, and editing. **Prerequisites:** OFFT B253a: OFFT B52ac/ B252c with a grade of "C" OR 35 NWAM on a 5-minute typing test plus knowledge of proper document formatting. OFFT B253b: OFFT B253a with a grade of "C." OFFT B253c: OFFT B253b with a grade of "C." **Recommended:** English Level 5 and knowledge of MS Word. **Hours:** (90) 5 hours, for 6 weeks per part, individualized instruction and supervised lab. Open entry/open exit. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

OFFT B255 Keyboard Skill Building (0.5 unit)

Individualized instruction designed to increase or rebuild typing speed. **Prerequisite:** Minimum typing placement score of 30 NWAM. **Hours:** (30) 30 hours by arrangement in supervised lab for 6 weeks. Open entry/open exit. **Repeat:** 1. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

OFFT B256 Spelling (1.5 units)

Reviews, illustrates, and applies the basic spelling rules necessary to become a competent speller. **Recommended:** Reading Level 5 or 6, English Level 5. **Hours:** (27) 3 hours individualized instruction and supervised lab for 9 weeks. Open entry/open exit. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

OFFT B257 Filing (1.5 units)

Fundamentals, rules and procedures common to basic systems of filing. Filing equipment and supplies are used to provide instruction and practice in alphabetic, numeric, geographic, and subject filing. **Hours:** (27) 3 hours individualized instruction and supervised lab for 9 weeks. Open entry/open exit. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

OFFT B275 English for Business•Professional•Technical (3 units)

Basic English usage including punctuation, capitalization, number usage, plurals, possessives, and grammar. **Recommended:** English Level 5 eligibility, Reading Level 5 or 6. **Hours:** (54) 3 hours individualized instruction and supervised lab. Open entry/open exit. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent course, OFFT B75.

OFFT B280 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. **Prerequisites:** Keyboarding speed of 40 NWAM; OFFT B75/B275 with a grade of "C." **Recommended:** English Level 6 or evaluation by instructor. **Hours:** (27) 3 hours individualized instruction and supervised lab for 9 weeks. Open entry/open exit. **Offered:** F, S, SS. **CCS:**

Occupational Education. **Not Transferable:** Associate Degree only.

OFFT B281 Beginning Gregg Shorthand Theory (3 units)

Beginning study of Gregg Shorthand theory with dictation and transcription practice. **Prerequisite:** Minimum typing speed of 30 WAM accurately. **Recommended:** English Level 5, Reading Level 5 or 6. **Hours:** (90) 5 hours individualized instruction and supervised lab. Open entry/open exit. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

OFFT B282 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. **Prerequisites:** OFFT B281 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. **Recommended:** English Level 5, Reading Level 5 or 6. **Hours:** (90) 5 hours individualized instruction and supervised lab. Open entry/open exit. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

REAL ESTATE

Credit limitations may apply. For specific information see a counselor or the transfer institution.

REAL B39 Principles of Real Estate (3 units)

Introduction to the many fields of real estate activity in California. Basic information about the ownership, use and enjoyment of land. Furnishes the proper foundation including the language of real estate transactions for anyone interested in a real estate career. Satisfies partial educational requirement of state sales and broker's license. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

REAL B55 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. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. Field trips required. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

REAL B57 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. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

REAL B60 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. **Recommended:** REAL B39. **Hours:** (54) 3 lect/disc. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

REAL B61 Real Estate Economics (3 units)

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. **Recommended:** REAL B39. **Hours:** (54) 3 lect/disc. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

REAL B62 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. **Recommended:** REAL B39. **Hours:** (54) 3 lect/disc. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

REAL B63 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. **Recommended:** REAL B39. **Hours:** (54) 3 lect/disc. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

REAL B64 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. **Recommended:** Reading Level 5 or 6, real estate license or REAL B39. **Hours:** (54) 3 lect. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

REAL B65 Real Estate Investment and Taxation (3 units)

Principles and practical applications of real estate investment and tax analysis. Basic fundamentals relevant to students interested in learning real estate investment techniques. Real estate form and cases are used to aid in solving problems. **Recommended:** Some previous knowledge of taxes and/or evaluation by instructor, one year of accounting. REAL B39, REAL B60, REAL B64. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

REAL B68 Advanced Real Estate Appraisal (3 units)

Principles of appraisal, the appraisal process, features of appraisal, property considerations, appraisal techniques and professional standards of appraisers. Actual appraisal of a local apartment complex illustrating all of the factors involved in the appraisal process. Satisfies partial educational requirement of State Brokers Examination. **Prerequisite:** REAL B63 with a grade of "C." **Hours:** (54) 3 lect. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

REAL B70 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. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 18 hours per unit. **Repeat:** as indicated. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

REAL B70a Salesperson/Broker Prelicense Preparation - Repeat: 3. Offered: F, S.**REAL B266 Real Estate Mathematics (2 units)**

Development of skill in solving real estate quantitative problems with emphasis on commissions and selling price, profit and loss, principal and interest payments, points, property and transfer taxes, insurance, ratio and scale, prorations, area and volume measurements and property descriptions. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 individualized instruction and supervised lab. Open entry/open exit. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

SMALL BUSINESS

SMBS B54 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, 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. **Recommended:** Reading Level 5 or 6. **Hours:** (27) 3 lect/disc for 9 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

SMBS B55 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. **Recommended:** Reading Level 5 or 6. **Hours:** (9) 3 lect/disc for 3 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

SMBS B56 Marketing a Small Business (1.5 units)

Provides an understanding of the importance of marketing to the success of a small business. A close examination of the marketing plan, including advertising costs and allocations. Reviews the components of the marketing mix as they relate to the overall business strategy. This course satisfies one of the requirements for a certificate from the US Small Business Administration. **Hours:** (27) 3 lect for 9 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

SMBS B60 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. **Recommended:** Reading Level 5 or 6. **Hours:** (36) 3 lect/disc for 12 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

SMBS B63 Insuring a Small Business (0.5 unit)

The importance of property and casualty insurance in the success of a small business. A close examination of steps required to protect a small business from risks of loss and

bankruptcy. Emphasis is on the risk management process. **Hours:** (9) 3 lect for 3 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

SMBS B71 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. **Recommended:** Reading Level 5 or 6. **Hours:** (9) 3 lect/disc for 3 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

SMBS B72 Tax Savvy for Small Business (0.5 unit)

Tax responsibilities, assistance in making the best tax decisions for small business, 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. **Recommended:** Reading Level 5 or 6. **Hours:** (9) 3 lect/disc for 3 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

SMBS B74 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. **Recommended:** Reading Level 5 or 6. **Hours:** (9) 3 lect/disc for 3 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

Communications

Journalism

Speech

The Communications Department offers courses which provide lower division training for Journalism, and Speech majors who expect to transfer at the end of their sophomore year. Students should be aware that American Sign Language (formerly Special Education) is now listed in Foreign Language.

ASSOCIATE DEGREE PROGRAMS

Students expecting to transfer to an upper division institution with a major in Journalism 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.

Journalism

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

Required Courses: 20 units

Course Number	Title	Units
JRNL B1	Media and Society	3.0
JRNL B2	Beginning Reporting	3.0
JRNL B15	Press Photography	3.0
SPCH B1 or SPCH B2	Speech Communication Interpersonal Communication	3.0
ENGL B1	Introductory Composition	4.0
<i>At least four units must be taken from the following:</i>		
JRNL B27a	Newspaper Production	2-4.0
JRNL B27e	Photography Lab for Campus Publications	2-4.0

Speech

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

Required Courses: 18 units

Course Number	Title	Units
SPCH B1	Speech Communication	3.0
SPCH B2	Interpersonal Communication	3.0
SPCH B3	Business Communication	3.0
SPCH B5	Rhetoric and Argumentation	3.0
SPCH B21 or ENGL B35	Oral Interpretation Children's Literature and Storytelling	3.0
SPCH B27/B27L	Intercollegiate Speech Competition	3.0

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designa-

tion, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

COMMUNICATIONS

COMM B248ab Cooperative Work Experience Education (1-8 units. Limit 16 units)

See WEXP B248ab description.

COMM B249ab Cooperative Work Experience Education (1-4 units. Limit 16 units)

See WEXP B249ab description.

JOURNALISM

Credit limitations may apply. For specific information see a counselor or the transfer institution.

JRNL B1 Media and Society (3 units)

A general interest survey and evaluation of the mass media: newspapers, magazines, radio, music industry, television, motion pictures, advertising, public relations and the Internet. The focus is to provide the media consumer with an historical and theoretical perspective within which to better understand the relationship between society and today's mass communications. Course content discusses the history, relationships, ethics, rights and responsibilities of media as well as topics of current interest. **Recommended:** English Level 5, Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. Field trips required. **Offered:** F. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges. (CAN JOUR 4)

JRNL B2 Beginning Reporting (3 units)

Introduction to 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. **Recommended:** English Level 6, Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. (CAN JOUR 2)

JRNL B4 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. **Recommended:** JRNL B2, Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. Field trips required. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

JRNL B15 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. **Recommended:** English Level 6, Reading Level 5 or 6. **Hours:** (90) 2 lect/disc, 3 supervised lab. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

JRNL B26 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 B2. **Recommended:** Concurrent enrollment in JRNL B27a. **Hours:** (18) 1 lect. **Repeat:** 3. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

JRNL B27a Newspaper Production (2 units)

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. **Recommended:** JRNL B2. **Hours:** (72) 1 lect, 3 lab. Field trips required. **Repeat:** 3. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

JRNL B27e Photography Laboratory for Campus Publications (2 units)

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. **Recommended:** JRNL B15, English Level 6, Reading Level 5 or 6. **Hours:** (72) 1 lect, 3 lab. Field trips required. **Repeat:** 3. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

JRNL B52 Multi-Cultural Media Workshop (3 units)

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. **Recommended:** English Level 6, Reading Level 5 or 6. **Hours:** (99) 17.5 lect, 32 lab for 2 weeks. **Offered:** SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

JRNL B261 Journalism Tutorial Laboratory (0 units)

Provides supervised laboratory time during which students may obtain advice and hands-on experience producing journalism class assignments, including writing, photography, graphic arts and advertising sales. Students will learn how to write and/or take photos for campus publications, sell advertising, get training on computer desktop publishing, and design newspaper, magazine and public relations

pages and brochures. **Prerequisite:** Concurrent enrollment in a journalism, photography or special studies class. **Hours:** (18-540) 1-30 individualized instruction and supervised lab. Open entry/open exit. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

SPEECH

Credit limitations may apply. For specific information see a counselor or the transfer institution.

SPCH B1 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. **Recommended:** English Level 6, Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN SPCH 4)

SPCH B2 Interpersonal Communication (3 units)

Introduction to all aspects of the communication process, including intra and inter-personal communication, as well as public speaking. Emphasizes an understanding of communication in everyday life in conjunction with a knowledge of how to present ideas, thoughts and feelings. **Recommended:** English Level 6, Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

SPCH B3 Business Communications (3 units)

An introduction to organizational communication. Instruction in group communication, listening, conflict resolution, leadership, employee phases and interviewing. Emphasizes understanding of communication in the work place and related group processes. **Recommended:** English Level 6, Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, BUS B3.

SPCH B5 Rhetoric and Argumentation (3 units)

Theoretical and practical aspects of argumentation (both general and legal) and public debate. Emphasis is on composition, presentation and evaluation of speeches of argumentation and debate, research, structuring arguments, evaluating argumentation, analysis, refutation and rebuttal. **Recommended:** English Level 6, Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN SPCH 6)

SPCH B21 Oral Interpretation (3 units)

Study of the theoretical and technical aspects involved in the selection, analysis, and oral performance of literature from a wide range of world cultures as well as American ethnic groups. Includes participation in various types of performance exercises including presentation of prose, poetry, drama and

group ensemble. **Recommended:** English Level 6, Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

SPCH B27 Intercollegiate Speech Competition Preparation (1-2 units)

Training in various speech forms for forensic and community speaking. Intensive discussion and practice in prepared and limited preparation events including humorous, oral interpretation, readers' theatre, duet interpretation and communication analysis. **Recommended:** English Level 6, Reading Level 5 or 6. **Hours:** (54-108) 1 unit: 3 lab; 2 units: 6 lab. Field trips required. **Repeat:** 3. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

SPCH B27L Intercollegiate Speech Competition Laboratory (0.5-3 units)

Participation in intercollegiate speech competitions and community speaking situations. Specialization in debate, humorous, oral interpretation, readers' theatre, duet interpretation, persuasive, impromptu, extemporaneous, or communication analysis required. **Recommended:** English Level 6, Reading Level 5 or 6. **Hours:** (27-162) 0.5 unit: 1.5 lab; 1 unit: 3 lab; 1.5 units: 4.5 lab; 2 units: 6 lab; 2.5 units: 7.5 lab; 3 units: 9 lab. Field trip required. **Repeat:** 3. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

SPCH B40 Topics in Communication (1 unit)

Development of a selected branch of speech communication. **Hours:** (18) 2 lect for 9 weeks. Field trips required. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and Private Colleges. **Note:** Credit Limitations may apply.

SPCH B40a Interviewing for Athletes

SPCH B51 General Speech (3 units)

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. **Hours:** (54) 3 lect/disc. **CCS:** Liberal Arts & Sciences. **Not Transferable:** Not degree applicable.

SPCH B261 Speech Tutorial Laboratory (0 units)

Provides supervised laboratory time during which students may obtain advice and hands-on experience preparing collegiate speech and/or debate events including researching, analyzing, organizing, writing and practicing presentations for collegiate competition. Students will refine their abilities to write effective speeches, cases, briefs and/or oral interpretation programs, gain training on effective Internet research, and become poised and powerful speakers. **Prerequisite:** Concurrent enrollment in SPCH B1, B5, B21, or B27. **Hours:** (18-540) 1-30 individualized instruction and supervised lab. Open entry/open exit. **Offered:** F, S. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Not Degree Applicable.

SPEECH COURSES FOR ENGLISH AS A SECOND LANGUAGE STUDENTS

ENSL B21 Accent Improvement

See Foreign Language.

ENSL B22 Group Discussion and Conversation

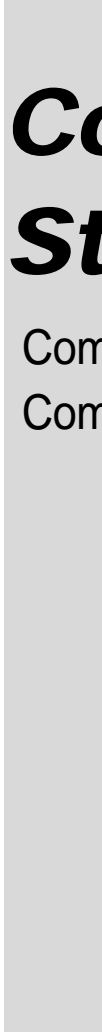
See Foreign Language

ENSL B71ab Basic Listening and Speaking I

See Foreign Language

ENSL B71cd Basic Listening and Speaking II

See Foreign Language.



Computer Studies

Computer Information Systems
Computer Science

CERTIFICATES OF COMPLETION

Certificates of completion are awarded for completion of a course, or short sequence of courses. The Certificate provides evidence of training in a limited area of study. Employees find these certificates helpful in demonstrating to employers that they have upgraded their current skills or developed new skills in other areas. Certificates of Completion are issued in the following areas upon completion of the courses listed with a grade of "C" or better.

**Network Administrator - Novell
Certificate of Completion**

Required Courses: 3 units

Course Number	Title	Units
COMS B80	CNA/CNE Network Administrator - Novell	3.0

**Advanced Network Administration -Novell
Certificate of Completion**

Required Courses: 2 units

Course Number	Title	Units
COMS B81	CNE Advanced Network Administration - Novell	2.0

**Network Technologies
Certificate of Completion**

Required Courses: 3 units

Course Number	Title	Units
COMS B82	MCSE/CNE Network Technologies	3.0

**Installation/Configuration - Novell
Certificate of Completion**

Required Courses: 1 unit

Course Number	Title	Units
COMS B83	CNE Installation/Configuration - Novell	1.0

**Administering/Supporting Microsoft NT
Certificate of Completion**

Required Courses: 3 units

Course Number	Title	Units
COMS B91	MCSE Administering and Supporting Microsoft NT Server	3.0

Office Software Specialist Certificate of Completion

The office software specialist certificate is designed for the student who plans to specialize in office software. Upon completion of the following courses with at least a "C" grade in each course, a student will be awarded an Office Software Specialist Certificate of Completion.

Required Courses: 13-14.5 unit

Course Number	Title	Units
COMS B52a	Introduction to the Microcomputer and Windows	1.0
COMS B5	Introduction to Microcomputer Applications	3.0
COMS B53 or COMS B57b &	Intermediate Microcomputer Applications	3.0
COMS B62b &	Intermediate Microsoft Word for Windows (1.0)	
	Intermediate Spreadsheets with Excel (1.0)	

COMS B68b	Intermediate Microsoft Access (1)	
COMS B70	Introduction to Electronic Presentations with Microsoft Powerpoint	1.0
COMS B73	Introduction to the Internet	1.0
COMS B74a	Web-Site Construction Using Web-Authoring Tools	1.5
MGMT B62 or BUS B5	Ethics in the Workplace	1.5
OFFT B252a	Human Relations and Motivation (3)	
	Computer Keyboarding, Beginning, Part 1	1.0

Geographic Information Systems (GIS) Certificate of Completion

Designed for students who plan to utilize GIS to display and analyze a variety of information that is geographically related. This certificate provides knowledge and skills for public and private sector applications of GIS technologies. Upon completion of the following courses with at least a "C" grade in each course, a student will be awarded a Geographic Information Systems (GIS) Certificate of Completion.

Required Courses: 16 units

Course Number	Title	Units
COMS B32	Programming in Windows Using Visual BASIC	3.0
COMS B34	Business Database Systems	3.0
COMS B37	Introduction to Geographic Information Systems (GIS)	3.0
COMS B77	Introduction to ArcView, GIS	1.0
GEOG B1	Physical Elements of Geography	3.0

Electives: at least 3 units

Course Number	Title	Units
COMS B36	Systems Analysis and Design	3.0
ART B20	Introduction to Computer Graphics	3.0
INDR B52	Geographic Information Systems (GIS)	3.0
MATH B22	Elementary Probability and Statistics	5.0

Web Authoring Certificate

Designed for the student who plans to specialize in creating Web sites. Upon completion of the following courses with at least a "C" grade in each course, a student will be awarded a Web Authoring Certificate of Completion.

Required Courses: 15 units

Course Number	Title	Units
COMS B74a	Web-Site Construction Using Web Authoring Tools	1.5
COMS B74b	Web-Site Construction Using Hypertext Markup Language	1.5
COMS B74c or COMS B74e	Web-Site Construction Using Dynamic HTML	1.5
COMS B74d or COMS B74f	Intermediate Web Site Construction Using FrontPage 2000	1.5
	Intermediate Dynamic HTML	1.5
	Advanced Web Site Construction Using FrontPage 2000	1.5
BUS B61	Electronic Commerce	1.0
MGMT B65a	Basic Principles of English for Business/Public Organizations	1.0
ART B20	Introduction to Computer Graphics	3.0

Electives: at least 4 units

Course Number	Title	Units
ART B3e	Fundamentals of Color 1	3.0
ART B21	Graphic Design	3.0
ART B24	Digital Imaging	3.0
COMS B10	Structured Program Design	1.0
COMS B14	Introduction to Programming with Java	3.0
COMS B32	Programming in Windows Using Visual Basic	3.0
COMS B34	Business Database Systems	3.0
COMS B82	MCSE/CNE Networking Technologies	3.0
MKTG B1	Fundamentals of Marketing	3.0

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.

Required Courses: 38 units

Course Number	Title	Units
COMS B2	Introduction to Computer Information Systems	3.0
COMS B5	Introduction to Microcomputer Applications	3.0
COMS B10	Structured Program Design	1.0
COMS B16	COBOL Programming Language	3.0
COMS B26	Advanced Programming in COBOL	3.0
COMS B32	Programming in Windows Using Visual BASIC	3.0
COMS B34	Business Database Systems	3.0
COMS B36	Systems Analysis and Design	3.0
COMS B37	Introduction to Geographic Information Systems (GIS)	3.0
COMS B82	MCSE/CNE Networking Technologies	3.0
BSAD B1a or ACCT B53a and BSAD B20	Financial Accounting Introduction to Accounting (3) Introduction to Business (3)	4.0

Electives: at least 4-6 units

Course Number	Title	Units
COMS B11	Introduction to Programming with Pascal	3.0
COMS B12	Introduction to Programming with BASIC	3.0
COMS B25	Introduction to Programming with C	3.0
COMS B27	Introduction to Assembly Language	3.0
COMS B35	Object-Oriented Programming with C++	3.0
COMS B74a	Web-Site Construction Using Web Authoring Tools	1.5
COMS B74b	Web-Site Construction Using Hypertext Markup Language	1.5
COMS B74c	Web-Site Construction Using Dynamic HTML	1.5
COMS B74d	Intermediate Dynamic HTML	1.5
COMS B80	CNA/CNE Network Administration - Novell	3.0

COMS B81	CNE Advanced Network Administration - Novell	3.0
COMS B83	CNE Installation and Configuration - Novell	3.0
COMS B91	MSCE Administering and Supporting Microsoft NT Server	3.0
BSAD B1b	Managerial Accounting	4.0
BSAD B20	Introduction to Business	3.0
MATH B22	Elementary Probability and Statistics	5.0

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.

Required Courses: 35 units

Course Number	Title	Units
COMS B2	Introduction to Computer Information Systems	3.0
COMS B10	Structured Program Design	1.0
COMS B11 or COMS B12	Introduction to Programming with Pascal Introduction to Programming with BASIC	3.0
COMS B25	Introduction to Programming with C	3.0
COMS B27	Introduction to Assembly Language	3.0
COMS B32	Programming in Windows Using Visual BASIC	3.0
COMS B35	Object-Oriented Programming with C++	3.0
COMS B82	MCSE/CNE Networking Technologies	3.0
MATH B6a	Analytic Geometry and Calculus I	4.0

Electives: at least 9 units

Course Number	Title	Units
COMS B5	Introduction to Microcomputer Applications	3.0
COMS B11	Introduction to Programming with Pascal	3.0
COMS B12	Introduction to Programming with BASIC	3.0
COMS B16	COBOL Programming Language	3.0
COMS B21	Data Structures with Pascal	3.0
COMS B34	Business Database Systems	3.0
COMS B37	Introduction to Geographic Information Systems (GIS)	3.0
COMS B74b	Web-Site Construction Using Hypertext Markup Language	1.5
COMS B74c	Web-Site Construction Using Dynamic HTML	1.5
COMS B74d	Intermediate Dynamic HTML	1.5
COMS B80	CNA/CNE Network Administration - Novell	3.0
COMS B81	CNE Advanced Network Administration - Novell	3.0
COMS B83	CNE Installation and Configuration - Novell	3.0
COMS B91	MSCE Administering and Supporting Microsoft NT Server	3.0
MATH B22	Elementary Probability and Statistics	5.0

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 to 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.

Required Courses: 23 or 24 units

Course Number	Title	Units
COMS B2 or	Introduction to Computer Information Systems	3.0
COMS B5	Introduction to Microcomputer Applications	
COMS B11 or	Introduction to Programming with Pascal	3.0
COMS B12	Introduction to Programming with BASIC	
COMS B16	COBOL Programming Language	3.0
COMS B21 or	Data Structures with Pascal	3.0
COMS B26 or	Advanced Programming in COBOL	
COMS B35	Object-Oriented Programming with C++	
COMS B32	Programming in Windows Using Visual BASIC	3.0
BSAD B1a	Financial Accounting	4.0
MATH B22 or	Elementary Probability and Statistics	5.0
PSYC B5	Elementary Statistics for the Behavioral and Social Sciences (4.0)	

Other Suggested Courses

Course Number	Title	Units
COMS B5	Introduction to Microcomputer Applications	3.0
COMS B25	Introduction to Programming with C	3.0
COMS B34	Business Database Systems	3.0
COMS B35	Object-Oriented Programming with C++	3.0
COMS B37	Introduction to Geographic Information Systems (GIS)	3.0
COMS B74a	Web-Site Construction Using Web Authoring Tools	1.5
COMS B74b	Web-Site Construction Using Hypertext Markup Language	1.5
COMS B74c	Web-Site Construction Using Dynamic HTML	1.5
COMS B74d	Intermediate Dynamic HTML	1.5
COMS B80	CNA/CNE Network Administrator - Novell	3.0
COMS B81	CNE Advanced Network Administration - Novell	2.0
COMS B82	MCSE/CNE Network Technologies	3.0
COMS B83	CNE Installation/ Configuration - Novell	1.0
COMS B91	MCSE Administering and Supporting Microsoft NT Server	3.0
MATH B2	Basic Functions and Calculus for Business	4.0
BSAD B1b	Managerial Accounting	4.0
BSAD B20	Introduction to Business	3.0

ECON B1	Principles of Economics-Micro	3.0
ECON B2	Principles of Economics-Macro	3.0
MGMT B43	Principles of Organization and Management	3.0
MKTG B1	Fundamentals of Marketing	3.0
SPCH B1	Speech Communications	3.0

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.

Required Courses: 35 units

Course Number	Title	Units
COMS B2	Introduction to Computer Information Systems	3.0
COMS B5	Introduction to Microcomputer Applications	3.0
COMS B10	Structured Program Design	1.0
COMS B16	COBOL Programming Language	3.0
COMS B32	Programming in Windows Using Visual BASIC	3.0
COMS B26	Advanced Programming in COBOL	3.0
COMS B34	Business Database Systems	3.0
COMS B36	Systems Analysis and Design	3.0
COMS B82	MCSE/CNE Network Technologies	3.0
BSAD B1a	Financial Accounting	4.0

Electives: at least 6 units

Course Number	Title	Units
COMS B11	Introduction to Programming with Pascal	3.0
COMS B12	Introduction to Programming with BASIC	3.0
COMS B25	Introduction to Programming with C	3.0
COMS B27	Introduction to Assembly Language	3.0
COMS B35	Object-Oriented Programming with C++	3.0
COMS B37	Introduction to Geographic Information Systems (GIS)	3.0
COMS B74A	Web-Site Construction/Authoring Tools	1.5
COMS B74B	Web-Site Construction/Hypertext Language	1.5
COMS B74c	Web-Site Construction Using Dynamic HTML	1.5
COMS B74d	Intermediate Dynamic HTML	1.5
COMS B80	CNA/CNE Network Administrator/Novell	3.0
COMS B81	CNE Advanced Network Administration - Novell	2.0
COMS B82	MCSE/CNE Network Technologies	3.0
COMS B83	CNE Installation/ Configuration - Novell	1.0
COMS B91	MCSE Administering and Supporting Microsoft NT Server	3.0
BSAD B1b	Managerial Accounting	4.0
BSAD B20	Introduction to Business	3.0
ART B20	Introduction to Computer Graphics	3.0

Other Suggested Courses

Course Number	Title	Units
MATH B2	Basic Functions and Calculus for Business	4.0
ECON B1	Principles of Economics-Micro	3.0
ECON B2	Principles of Economics-Macro	3.0
MGMT B43	Principles of Organization and Management	3.0

MKTG B1	Fundamentals of Marketing	3.0
SPCH B1	Speech Communication	3.0

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.

Required Courses: 36 units

Course Number	Title	Units
COMS B2	Introduction to Computer Information Systems	3.0
COMS B10	Structured Program Design	1.0
COMS B25	Introduction to Programming with C	3.0
MATH B6a	Analytic Geometry and Calculus I	4.0
MATH B6b	Analytic Geometry and Calculus II	4.0
MATH B6c	Calculus III	4.0
MATH B22	Elementary Probability and Statistics	5.0

Electives: at least 12 units

Course Number	Title	Units
COMS B11	Introduction to Programming with Pascal	3.0
COMS B12	Introduction to Programming with BASIC	3.0
COMS B21	Data Structures with Pascal	3.0
COMS B27	Introduction to Assembly Language	3.0
COMS B32	Programming in Windows Using Visual BASIC	3.0
COMS B34	Business Database Systems	3.0
COMS B35	Object-Oriented Programming with C++	3.0
COMS B82	MCSE/CNE Networking Technologies	3.0
MATH B6d	Ordinary Differential Equations	3.0
MATH B6e	Elementary Linear Algebra	3.0

Other Suggested Courses

Course Number	Title	Units
COMS B5	Introduction to Microcomputer Applications	3.0
COMS B37	Introduction to Geographic Information Systems (GIS)	3.0
COMS B74b	Web-Site Construction Using Hypertext Markup Language	1.5
COMS B74c	Web-Site Construction Using Dynamic HTML	1.5
COMS B74d	Intermediate Dynamic HTML	1.5
PHYS B2a	General Physics-Mechanics and Heat	4.0
PHYS B2b	General Physics-Sound, Light Electricity, Magnetism, Modern Physics	4.0
PHIL B7	Introduction to Logic	3.0
ELET B1	Basic Electricity	4.0

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstra-

tion; **Repeat** repeatability (see policy on course repetition); **CCOMS B** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

COMPUTER STUDIES

Credit limitations may apply. For specific information see a counselor or the transfer institution.

COMS B2 Introduction to Computer Information Systems (3 units)

Introduction to the concepts of computer information systems as problem-solving tools in business, economics, mathematics, and the sciences. Includes the history of computer system components, and sequential and direct-access processing. Database management systems, teleprocessing, and distributed processing are covered. An overview of personal computer applications software (word processing, electronic spreadsheets, and personal database management systems) are also included. **Recommended:** Minimum one year of high school algebra or MATH BA and Reading Level 5 or 6. **Hours:** (81) 3 lect, 1.5 lab by arrangement. **Offered:** F, S, SS. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

COMS B5 Introduction to Microcomputer Applications (3 units)

Intended for home users and business people who desire a working knowledge of personal computer hardware and software. Special emphasis on software that is most widely used in Kern County as well as the nation. Mainly focuses on business and home applications of personal computers. Hands-on training with word processing, spreadsheets, database management systems and the necessary operating system fundamentals to use the listed application software. **Recommended:** Reading Level 5 or 6. **Hours:** (81) 3 lect, 1.5 lab by arrangement. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

COMS B10 Structured Program Design (1 unit)

Fundamentals of writing computer programs. Emphasis is on the development of logic to solve problems. Covers various tools and techniques used to write structured programs using any programming language. **Recommended:** Reading Level 5 or 6, MATH BA. **Hours:** (18) 3 lect for 6 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

COMS B11 Introduction to Programming with Pascal (3 units)

Fundamentals of structured programming 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. **Prerequisite:** MATH BD or two years of high school algebra or equivalent or evaluation by instructor. **Recommended:** Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab by arrangement. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

COMS B12 Introduction to Programming with BASIC (3 units)

Fundamentals of programming and operating computer systems in BASIC (Beginner's All-purpose Symbolic Instruction Code). Develops skills in computer programming and general problem-solving tools in business, mathematics, physical sciences, social sciences, and other disciplines. **Prerequisite:** MATH BD or two years of high school algebra or equivalent. **Recommended:** COMS B2 or COMS B10 (may be taken concurrently), Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab by arrangement. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

COMS B14 Introduction to Programming with Java (3 units)

Fundamentals of structured programming and operating systems in Java. Develops structured programming and problem solving skills and provides experience in using the computer in a variety of applications. **Prerequisite:** MATH BD or two years of high school algebra or equivalent or evaluation by instructor of the student's math skills. **Recommended:** Reading level 5 or 6. **Hours:** (108) 3 lect, 3 lab for 18 weeks. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

COMS B16 COBOL Programming Language (3 units)

The fundamentals of the COBOL programming language. Writing structured COBOL programs to solve various types of business problems. **Prerequisite:** COMS B2 or evaluation by instructor. **Recommended:** Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab by arrangement. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges. (CAN CSCI 8)

COMS B21 Data Structures with Pascal (3 units)

Advanced techniques of programming in the structured problem-solving language Pascal. Emphasis is on developing advanced skills in algorithm building and understanding data structures in a variety of applications. **Prerequisite:** COMS B11 or evaluation by instructor. **Recommended:** Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab by arrangement. **Offered:** S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

COMS B25 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. **Prerequisite:** Successful completion of a high-level programming language course, or an assembly language course or evaluation by instructor. **Recommended:** Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab by arrangement. **Offered:** F. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

COMS B26 Advanced Programming in COBOL (3 units)

Advanced applications, techniques, procedures, and language statements in COBOL. Development of skills required to write COBOL programs of professional quality. **Prerequisite:** COMS B16 or evaluation by instructor of COBOL programming skills. **Recommended:** MATH BA and Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab by arrangement. **Offered:** S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

COMS B27 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 supervisory functions, program modularization through effective use of macros and procedures, use of assembler, linker, object-library manager, and debugger utilities, and I/O to/from the screen, keyboard and auxiliary 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:** MATH BD or two years of high school algebra or equivalent, at least one course in high level computer language. **Recommended:** COMS B2 or COMS B10 (may be taken concurrently) Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab by arrangement. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges. (CAN CSCI 10)

COMS B32 Programming in Windows Using Visual BASIC (3 units)

An introduction to creating Windows applications using the Visual BASIC programming language. The course will cover the fundamentals of event-driven programming in a graphical user interface environment. Students will write programs using Visual BASIC forms and properties, events, controls, built-in functions, procedures, graphics and animation. **Prerequisite:** A high-level programming language. **Hours:** (108) 3 lect, 3 lab by arrangement. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

COMS B34 Business Database Systems (3 units)

The 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. Distinguishing between the various data structures. Designing databases for both the relational and CODASYL models, as well as the fundamentals of writing business applications.

Prerequisites: COMS B2 and COMS B16 or evaluation by instructor. **Hours:** (81) 3 lect, 1.5 lab by arrangement.

Offered: F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

COMS B35 OOP and Data Structures with C++ (3 units)

Object-oriented programming and data structures using C++. Topics include a quick review of the kernel language (ANSI-standard C), abstract data types, encapsulation, function and operator overloading (polymorphism), container classes, and inheritance. Topics also include stacks, queues, and ordered lists implemented as static arrays, dynamic arrays, linked lists, and binary trees. **Prerequisite:** COMS B25 or evaluation by instructor of student's knowledge of the C programming language. **Hours:** (108) 3 lect, 3 lab by arrangement. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

COMS B36 Systems Analysis and Design (3 units)

Tools and techniques involved in the analysis and design of computerized business systems. Investigative techniques such as interviewing, sampling, questionnaire design, cost-benefit analysis, project management tools, and evaluation of hardware, software and vendors; actual business systems.

Prerequisites: COMS B2 and a high-level programming language. **Recommended:** Reading Level 5 or 6. **Hours:** (72) 3 lect, 1 lab by arrangement. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

COMS B37 Introduction to Geographic Information Systems (GIS) (3 units)

An introduction to methods of managing and processing spatial data. Covers the basic assumptions, concepts, theories, and structures of geographic information systems. Hands-on experience in data input, management, analysis, and display.

Recommended: Minimum one year of high school algebra of MATH BA (may be taken concurrently). **Hours:** (108) 3 lect, 3 lab by arrangement. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, INDR B37.

COMS B40 Special Topics in Computing (0.25 - 3 unit)

Special computer technology topics of interest and concern, including recent developments in the field of computing.

Hours: (4-54) 1-18 weeks. **Repeat:** 3. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

COMS B50a Introduction to the Microcomputer and MS DOS (1 unit)

An introduction to the microcomputer and its operating systems. Enables the student to use the disk operating system (DOS) on IBM and compatible microcomputers, including program and file capabilities, advanced features, many utilities and major applications, and provide a basis for computer literacy. **Hours:** (36) 3 lect, 3 lab by arrangement for 6 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B50b Intermediate DOS (1 unit)

A continuation of COMS B50a. Hard disk management, subdirectories, paths, batch files, menus, backup strategies, protection and security, and optimizing the performance of the computer. Provides a foundation for setting up a computer in a small business environment. **Prerequisite:** COMS B50a. **Hours:** (36) 3 lect, 3 lab by arrangement for 6 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B52a Introduction to the Microcomputer and Windows (1 unit)

An introduction to the microcomputer and the Microsoft Windows operating system. Provides a basis for computer literacy and enables the students to use the Windows operating system on an IBM and compatible microcomputers. Includes use of the mouse, the desktop, working with files, printers and fonts, the Windows Explorer, the accessories, sharing data between applications, the Windows Network Neighborhood, and how to customize and enhance the performance of the Windows operating system. **Hours:** (36) 3 lect, 3 lab by arrangement for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B53 Intermediate Microcomputer Applications (3 units)

A continuation of COMS B5. Intermediate capabilities of word processing, spreadsheet, database management system and electronic presentation application software programs. **Prerequisite:** COMS B5 or evaluation by instructor of student's Word, Excel, Access, PowerPoint, and operating system skills. **Recommended:** Reading Level 5 or 6. **Hours:** (81) 3 lect, 1.5 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B57a Introduction to Microsoft Word for Windows (1 unit)

Use of the Microsoft Word for Windows word processing application. Word Processing fundamentals such as creating, saving, and retrieving documents will be covered. Also included will be editing, formatting, proofing tools, and printing fundamentals. **Hours:** (36) 3 lect, 3 lab by arrangement for 6 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B57b Intermediate Microsoft Word for Windows (1 unit)

Intermediate capabilities for Microsoft Word for Windows word processing program. Word processing features such as merging, sorting, macros, and document management will be covered. **Prerequisite:** COMS B57a. **Hours:** (36) 3 lect, 3 lab by arrangement for 6 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B57c Advanced Microsoft Word for Windows (1 unit)

Word processing features such as using Microsoft draw, creating charts, columns, styles and outlines. **Prerequisite:** COMS B57b. **Hours:** (36) 3 lect, 3 lab by arrangement for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B62a Introduction to Spreadsheets with Excel (1 unit)

Introduces students to the use of the spreadsheet using the Excel spreadsheet program. Covers instruction in spreadsheet fundamentals, the use of a mouse, setting up a spreadsheet, cell data entry and edit, formulas, Excel menus, formats, and simple functions and graphs. **Recommended:** COMS B50a or some knowledge of microcomputer operations. **Hours:** (36) 3 lect, 3 lab by arrangement for 6 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B62b Intermediate Spreadsheets with Excel (1 unit)

Intermediate aspects of Excel. Includes advanced formatting, functions, and printing. Also presents database, enhances charts, and an introduction to macros and multiple spreadsheets. **Prerequisite:** COMS B62a or COMS B5 or evaluation of Microsoft Excel skills by instructor. **Hours:** (36) 3 lect, 3 lab by arrangement for 6 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B62c Advanced Spreadsheets with Excel (1 unit)

Advanced Excel emphasizes building and troubleshooting advanced worksheets and using multiple worksheets. Also includes building and troubleshooting advanced databases and charts, advanced functions, and advanced macros. **Prerequisite:** COMS B62b or evaluation by instructor of Excel skills. **Hours:** (36) 3 lect, 3 lab by arrangement for 6 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B68a Introduction to Microsoft Access (1 unit)

An introductory level course in the use of the Microsoft Access database management program. Designed to provide tools to solve typical database problems. Includes use of queries, forms, reports, and macros to provide customized information. **Hours:** (36) 3 lect, 3 lab by arrangement for 6

weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B68b Intermediate Microsoft Access (1 unit)

An intermediate level course in the use of the Microsoft Access database management program. Designed to provide tools to solve typical database problems. Includes advanced use of queries, forms, reports, and macros to provide customized information. **Hours:** (36) 3 lect, 3 lab for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B70a Introduction to Electronic Presentations with Microsoft Powerpoint (1 unit)

An introduction to the use of the Microsoft Powerpoint presentation package to create professional quality electronic presentations. The course will cover the basics of using Powerpoint as well as the basics of how to plan and build a presentation, making color and text choices, and adding graphics and other media. The course will also cover using Powerpoint to convert existing information such as word processing, and graphic data into a presentation. **Hours:** (36) 3 lect, 3 lab by arrangement for 6 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B72 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. **Hours:** (18-36) 1.5-3 lect and 1.5-3 lab by arrangement for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B73 Introduction to the Internet (1 unit)

An introduction to the history, structure, and tools of the Internet. Students will learn how to use electronic mail, listservs, newsgroups, FTP, Telnet, Gopher, and World Wide Web browsers. **Hours:** (36) 3 lect, 3 lab by arrangement for 6 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B74a Web-Site Construction Using Web Authoring Tools (1.5 unit)

An introduction to the creation of Web sites using a variety of resources. Emphasizes the use of popular Web-authoring tools (such as Netscape Composer and Microsoft FrontPage) to create custom Web pages without the knowledge of hypertext markup language. **Prerequisite:** COMS B52a or evaluation by instructor of the student's ability to use Windows; COMS B73 or evaluation by instructor of student's ability to navigate the Internet. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect, 3 lab by arrangement for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B74b Web-Site Construction Using Hypertext Markup Language (1.5 unit)

An introduction to using hypertext markup language to create Web sites. Students will learn how to create HTML documents in a text editor, how to test and debug them, and how to publish their Web sites. **Prerequisite:** COMS B52a or evaluation by instructor of student's ability to use Windows; COMS B73 or evaluation by instructor of student's ability to navigate the Internet. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect, 3 lab by arrangement for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B74c Web-Site Construction Using Dynamic HTML (1.5 unit)

Uses dynamic hypertext markup language to create Web sites. Emphasizes scripting for flexibility, interactivity and dynamic content. Students will learn basic programming concepts and techniques, using HTML and popular scripting languages. Includes a brief introduction to the Java programming language. **Prerequisite:** COMS B73 or evaluation by instructor of student's ability to use HTML to create Web sites. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect, 3 lab by arrangement for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B74d Intermediate Dynamic HTML (1.5 units)

Uses intermediate-level dynamic HTML to enhance Web sites. Topics covered include: cascading style sheets; dynamic style, dynamic content, bound data and DHTML positioning. Other topics may be included/substituted in order to stay current with the field. **Prerequisite:** COMS B74c or evaluation by instructor of the student's ability to use dynamic HTML at an introductory level. **Recommended:** COMS B10 or a high-level programming language. Reading Level 5 or 6. **Hours:** (54) 3 lect, 3 lab arrangement for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B74e Intermediate Web Site Construction Using FrontPage 2000 (1.5 units)

Designing and implementing intermediate web-authoring components and concepts using FrontPage 2000. Covers techniques for implementing tables, frames, forms, components and java applets in an intermediate-level-setting. Also covers integration of design with technology components. **Prerequisite:** COMS B74a or evaluation by instructor of student's web authoring skills. **Hours:** (54) 3 lect, 3 lab by arrangement for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B74f Advanced Web Site Construction Using FrontPage 2000 (1.5 units)

Advanced web-site construction, design, and management tools present in FrontPage 2000, and their effective use in designing and creating web pages. **Prerequisite:** COMS B74e or evaluation by instructor of student's web authoring skills.

Hours: (54) 3 lect, 3 lab by arrangement for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B77 Introduction to Arc View® GIS (1 unit)

Creating, editing, querying, analyzing and displaying geographic and tabular data. Earn a Certificate of Completion. A conceptual experience and hands-on experience using ArcView®. **Hours:** (36) 3 lect, 3 lab by arrangement. **Repeat:** 3. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B79 Advanced Programming with Visual Basic (3 units)

Advanced techniques to design and implement desktop applications with Visual Basic. Topics include COM, ActiveX, using ADO, the Windows API, creating MDI programs, classes and collections. **Prerequisite:** COMS B32 or evaluation by instructor of student's Visual Basic programming skills. **Recommended:** Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab by arrangement. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B80 CNA/CNE Network Administration - Novell (3 units)

Fundamentals of managing a Novell network, using Novell administrative tools to set-up, manage, and employ basic network services, including file systems, network printing, security, and email. **Recommended:** Reading Level 5 or 6, COMS B50a, COMS B52a and COMS B82. **Hours:** (108) 3 lect, 3 lab by arrangement. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B81 CNE Advanced Network Administration - Novell (2 units)

Advanced management skills for managing a Novell network. Covers advanced server tuning for better performance, management of complex tree structures and networking environment, NDS partitioning and replication, time synchronization strategies, and integration with NetWare 3. **Recommended:** Reading Level 5 or 6 and COMS B80. **Hours:** (72) 3 lect, 3 lab by arrangement for 12 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B82 MCSE/CNE Networking Technologies (3 units)

Course serves as a general introduction to networking including local and wide area network technology. It lays the foundation for network design, installation and administration. **Recommended:** COMS B52a (Windows Operating System) and Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab by arrangement. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B83 CNE Installation and Configuration - Novell (1 unit)

Installing and configuring a NetWare network. Hands on experience, including scenarios for installing, upgrading, migrating, and implementing a Novell network. How to implement a different design of a NDS tree structure. **Recommended:** Reading Level 5 or 6 and COMS B81. **Hours:** (36) 3 lect, 3 lab by arrangement for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B91 MSCE Administering and Supporting Microsoft NT Server(3 units)

Course serves as a detailed evaluation of Microsoft Windows NT, including both the Client and Server software. It covers introductory and in-depth topics related to Windows NT Client and Server Administration, as well as the core components of the NT operating system. This course is in preparation for the MCSE exams. **Recommended:** COMS B52a (Windows Operating System), and COMS B82 (Network Technologies), and Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab by arrangement. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B95 MCSE Internetworking with Microsoft TCP/IP (3 units)

This “hands-on” course covers the fundamentals of the TCP/IP protocol suite, IP addressing, subnetting, Dynamic Host Configuration Protocol (DHCP), NetBIOS Name Resolution, implementing Windows internet Name Service (WINS), Microsoft Domain Name System (DNS) servers, and SNMP Service, and troubleshooting Microsoft TCP/IP. **Recommended:** Reading level 5 or 6, COMS B50a, COMS B52a, and COMS B91. **Hours:** (108) 3 lect, 3 lab by arrangement. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B100 Computer Hardware Diagnostics (1 unit)

Designed to cover the information and materials needed to enable students to successfully pass the A Plus examination. Deals with the hardware and software, installation and troubleshooting. The various diagnostic tools and methods used in the industry will be explored. **Hours:** (108) 3 lect, 3 lab for 18 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B248ab Cooperative Work Experience Education (1-8 units. Limit 16 units)

See WEXP B248ab description.

COMS B249ab Cooperative Work Experience Education (1-4 units. Limit 16 units)

See WEXP B249ab description.



English

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 B1 or B1a, and may take a literature class in fulfillment of the humanities requirement. Students seeking a Baccalaureate Degree should take English B1a and may take English B1b and other literature courses in fulfillment of specific General Education requirements. Students planning to major in English should take English B1a and B1b and at least two of the following: English B5a, B5b, B20a, B20b, B30a, B30b. Students planning to transfer to the University of California should consider English B2. *For specific information, students should consult the catalog of the school to which they intend to transfer.*

ELIGIBILITY FOR COMPOSITION COURSES

Bakersfield College attempts to provide courses for all student abilities so students can be successful and advance toward educational objectives. Academic Development B68, English B60, B1, and B1a are sequential courses designed to develop proficiency in writing. ENSL B3, B2, and B1 for speakers of other languages are parallel to the Academic Development and English courses. Eligibility for each of these courses depends on a student's writing ability. To place students into appropriate composition courses, the Assessment Center administers a combination objective/essay placement test, which students must complete prior to taking composition classes. Eligibility for ENSL courses is determined by placement testing in the International Student Center.

Eligibility for specific courses at placement are as follows: students placed at level 6 on the assessment tests are eligible for English B1a; those at level 5 are eligible for English B1; those at level 4 are eligible for English B60; and those at level 3 are eligible for Academic Development B68 (see Academic Development department).

After being placed, students must pass the course for that level with a minimum grade of "C" before advancing to the next level. **Students who do not meet eligibility requirements will be denied admission into composition courses unless they have obtained prior written authorization from a counselor.**

ASSOCIATE IN ARTS DEGREE PROGRAM

Required Courses: 18 units

Course Number	Title	Units
ENGL B1a	Expository Composition	4.0
ENGL B1b	Introduction to Types of Literature	3.0
<i>Choose 6 units from the following:</i>		6.0
ENGL B5ab	Survey of English Literature (3-3.0)	
ENGL B20ab	Survey of World Literature (3-3.0)	
ENGL B30ab	Survey of American Literature (3-3.0)	

Electives: at least 5 units

ENGL B2	Advanced Composition and Critical Thinking	5.0
ENGL B10	Introduction to Shakespeare	3.0
ENGL B11	Modern Drama	3.0
ENGL B12	Modern Short Fiction	3.0
ENGL B21	African-American Literature	3.0
ENGL B23	Women's Literature	3.0
ENGL B27	The Bible as Literature	3.0
ENGL B28	Classical Mythology	3.0
ENGL B29	Science Fiction	3.0
ENGL B35	Children's Literature and Storytelling	3.0
ENGL B41a	Introduction to Creative Writing	3.0

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

ENGLISH

Credit limitations may apply. For specific information see a counselor or the transfer institution.

ENGL B1 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 B1a. **Prerequisite:** ENGL B60 with a grade of "C" or "CR" or English Level 5. **Hours:** (72) 4 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

ENGL B1a Expository Composition (4 units)

Expository writing and reading. Emphasizes the organization and development of expository essays, study of style, application of critical thinking and writing skills, and preparation of a research paper. **Prerequisite:** ENGL B1 or ENSL B1 with a grade of "C" or English Level 6. **Hours:** (72) 4 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC,

CSU and private colleges. (CAN ENGL 2) (ENGL B1a + B1b = CAN ENGL SEQ A)

ENGL B1b 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 B1a. **Hours:** (54) 3 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN ENGL 4) (ENGL B1a + B1b = CAN ENGL SEQ A)

ENGL B2 Advanced Composition and Critical Thinking (5 units)

Expository writing, reading of expository and literary works; study of the most important ideas in great works in philosophy, natural science, literature, and the social and behavioral sciences; survey of methods of critical thinking and advanced composition. **Prerequisite:** ENGL B1a with a minimum grade of "C." **Hours:** (90) 4 lect/disc plus 1 hour arranged. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ENGL B5a-B5b Survey of English Literature (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. Recommended for students whose major or minor is English and for students who desire to extend their knowledge of the literary tradition. **Prerequisite:** Satisfactory completion of ENGL B1 with a minimum grade of "C" or English Level 6. **Recommended:** ENGL B1b. **Hours:** (54) 3 lect. **Offered:** F, S (two out of every three years). **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (ENGL B5a + B5b = CAN ENGL SEQ B)

ENGL B10 Introduction to Shakespeare (3 units)

Interdisciplinary approach to Shakespeare's work. Discussion and analysis of selected plays (tragedies, comedies, and histories) and the non-dramatic poetry. Content focuses on the historical, artistic, literary, theatrical, social, and moral influences of Renaissance England that contributed to Shakespeare's breadth, artistic progress, and literary achievement. **Prerequisite:** Satisfactory completion of ENGL B1 with a minimum grade of "C" or English Level 6. **Hours:** (54) 3 lect. Field trips may be required. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not applicable for English majors at UC system.

ENGL B11 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:** Satisfactory completion of ENGL B1 with a minimum grade of "C" or English Level 6. **Hours:** (54) 3 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ENGL B12 Modern 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:** Satisfactory completion of ENGL B1 with a minimum grade of "C" or English Level 6. **Hours:** (54) 3 lect. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ENGL B20a-B20b Survey of World Literature (3-3 units)

An historical survey of world literature, focusing on but not limited to Western world literature. **Prerequisite:** Satisfactory completion of ENGL B1 with a minimum grade of "C" or English Level 6. **Recommended:** ENGL B1b. **Hours:** (54) 3 lect. **Offered:** F, S (two out of every three years). **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ENGL B21 African-American Literature (3 units)

Major authors, their works, themes and movements in African-American literature in America from colonial times to the present. **Prerequisite:** Satisfactory completion of ENGL B1 with a minimum grade of "C" or English Level 6. **Hours:** (54) 3 lect. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ENGL B23 Women's Literature (3 units)

Exploration of the roles of women as revealed through women's writing: short stories, novels, poetry, drama, and essays. **Prerequisite:** Satisfactory completion of ENGL B1 with a minimum grade of "C" or English Level 6. **Hours:** (54) 3 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ENGL B27 The Bible as Literature (3 units)

Poetry and prose of the Bible, especially of the Old Testament. Includes lecture, discussion, and dramatic readings. **Prerequisite:** Satisfactory completion of ENGL B1 with a minimum grade of "C" or English Level 6. **Hours:** (54) 3 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ENGL B28 Classical Mythology (3 units)

A study of classical myth, saga, and local legend, primarily Greek and Roman. Includes Sumerian and Babylonian. Relates classical myths to historical and modern culture. **Prerequisite:** Satisfactory completion of ENGL B1 with a minimum grade of "C" or English Level 6. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ENGL B29 Science Fiction (3 units)

Through reading and discussing novels, short stories, graphic novels and viewing and discussing movies and videos, students will learn to define science fiction and identify principal themes. These themes include time travel, space exploration, encounters with extraterrestrials, extension of human powers through biological alteration and computer technology, creation of ideal societies (utopias), and ecological disaster. **Prerequisite:** Satisfactory completion of ENGL B1 with a minimum grade of "C" or English Level 6. **Hours:** (54) 3 lect. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ENGL B30a-B30b 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:** Satisfactory completion of ENGL B1 with a minimum grade of "C" or English Level 6. **Recommended:** ENGL B1b. **Hours:** (54) 3 lect. **Offered:** F, S (two out of every three years). **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ENGL B34 Introduction to Library Research (1 unit)

Familiarizes students with methods of research, a wide range of research materials, ways of evaluating the materials, and the preliminary steps in fitting the materials to a term paper topic and its thesis. **Recommended:** English Level 6 and concurrent enrollment in ENGL B1a. **Hours:** (18) 1 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ENGL B35 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:** Satisfactory completion of ENGL B1 with a minimum grade of "C" or English Level 6. **Hours:** (54) 3 lect/demo and field practice by arrangement. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

ENGL B41abcd Introduction to Creative Writing (3-3-3-3 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. **Prerequisite:** Satisfactory completion of ENGL B1 with a minimum grade of "C" or English Level 6. **Hours:** (54) 3 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

ENGL B60 Basic Writing Skills (4 units)

Review and application of fundamentals of standard English. Emphasizes sentence and paragraph writing. Practice in the writing process. **Prerequisite:** ACDV B68 or ENSL B3 with a minimum grade of "C" or "CR" or English Level 4. **Hours:** (72) 4 lect. **Offered:** F, S, SS. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ENGL B255 Supplemental Writing Lab (0.5 unit)

Designed for English composition students desiring additional assistance in specific writing areas. Students will work on writing assignments from English courses in which they are concurrently enrolled. **Prerequisite:** Concurrent enrollment in ENGL B60 or ENGL B1 or ENGL B1a. **Hours:** (9) Hours by arrangement. Individualized instruction and supervised lab. **Repeat:** 3. **Offered:** F, S. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Not degree applicable.

ENGL B261 Supervised Tutorial Writing Lab (0 units)

Provides supervised lab time during which students may obtain individualized instruction in such areas as writing research, analysis, and organization. **Prerequisite:** Concurrent enrollment in ENGL B60, or ENGL B1, or ENGL B1a. **Hours:** (2-85) 2-5 individualized instruction and supervised lab. Open entry/open exit. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Not degree applicable.

ENGLISH AS A SECOND LANGUAGE (ENSL)

Bakersfield College offers a complete program of courses for the ENSL student, including English, speech, reading courses, and counseling at the intermediate and advanced levels.

A comprehensive testing program has been especially designed to ensure that all foreign students are placed in the courses which will best suit their needs. **All ESL students are urged to take the Bakersfield College English as a Second Language Placement Test.**

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 second language are urged to visit the center and take advantage of the services offered there.

For course descriptions of ENSL courses, see Foreign Language.

For course descriptions of reading, spelling, vocabulary, and other writing courses, see Academic Development.



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.

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

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 B20a-B20b African American History of the United States (3-3 units)

Survey of the political, economic, and cultural history of the United States from the earliest colonial times to the present with emphasis on the role and contributions of African Americans. HIST B20a (to 1896) includes a study of the U.S. Constitution and federal government. HIST B20b (since 1877) includes a study of the state and local government of California. Satisfies the requirements in U.S. Constitution and American history and institutions. **Recommended:** Reading Level 5 or 6. **Hours:** (54-54) 3 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

CHICANO STUDIES

CHST B30a 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 evolution of the region with emphasis upon the inter-relationships between the histories of the United States and Mexico. Satisfies the requirements in U.S. Constitution, American history and institutions. **Hours:** (54) 3 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, HIST B30a.

CHST B30b History of Chicanos in the Southwest (3 units)

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. Satisfies the requirements in U.S. Constitution, American history, and institutions. **Hours:** (54) 3 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, HIST B30b.

CHST B36 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 process of assimilation, minority status, and Chicano culture. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, SOCI B36.

RELATED ETHNIC STUDIES COURSES

HIST B20a-B20b African American History of the United States (3-3 units)

Survey of the political, economic, and cultural history of the United States from earliest colonial times to present with emphasis on the role and contributions of African Americans. HIST B20a (to 1896) includes a study of the U.S. Constitution and federal government. HIST B20b (since 1877) includes a study of the state and local government of California. Satisfies the requirements in U.S. Constitution and American history and institutions. **Recommended:** Reading Level 5 or 6. **Hours:** (54-54) 3 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

HIST B36 History of Native Americans (3 units)

Survey of the origins, traditions, lifeway, and belief systems of the Native American. Emphasis is on the encounter with Anglo American expansion and on the impact of the governmental policies on this indigenous people. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Offered only occasionally.

PSYC B37 Psychology of Gender Roles (3 units)

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:** PSYC B1a. **Hours:** (54) 3 lect/disc. **CCS:** Liberal Arts & Sciences. **Transferable:** UC.

Family and Consumer Education

Child Development
Family and Consumer Education
Family Studies
Foods and Nutrition Program
Nutrition

The Family and Consumer Education Division offers students the opportunity to select among several career programs. The division also offers courses which provide lower division credit for majors transferring to baccalaureate programs. It is strongly recommended that students interested in child development work closely with the child development advisor.

Early Childhood Education Employment Readiness Academy

The Early Childhood Education Employment Readiness Academy is a one semester program. The skills you will learn are: 1) how to use appropriate guidance, 2) how to plan and carry out learning activities for children, (3) how to work as a team member in a preschool or child care center, and 4) how to apply infant/child first aid/CPR. Upon completion of this program you will earn 12 child development units. You will meet the qualifications of a teacher in a licensed, private child care center or an Associate Teacher in a subsidized preschool or child care center. For further information contact Office of Career Development and Workforce Preparation at 395-4089.

CDA (Child Development Associate)

The CDA may be substituted for nine semester units of child development credit.

CERTIFICATES OF COMPLETION

Child Development Assistant Teacher

The Certificate of Completion may be earned by students who satisfactorily complete the 6 units of coursework listed below with a grade of “C” or better. This coursework meets the requirements for the Child Development Assistant Teacher Permit.

Required Courses: 6 units

Course Number	Title	Units
CHDV B20	Introduction to Child Development	3.0
CHDV B36	Developmentally Appropriate Curriculum	3.0

Child Development Associate Teacher

The Certificate of Completion may be earned by students who satisfactorily complete the 12 units of coursework listed below with a grade of “C” or better. This coursework meets the requirements for the Child Development Associate Teacher Permit. This coursework also meets the Child Development requirements for a fully qualified teacher in a licensed Preschool Child Development Center or School-Age Center.

Required Courses: 12 units

Course Number	Title	Units
CHDV B20	Introduction to Child Development	3.0
CHDV B36	Developmentally Appropriate Curriculum	3.0
CHDV B42	Child, Family and Community	3.0
CHDV B49	Child Health, Safety and Nutrition	3.0

Child Development Master Teacher

The Certificate of Completion for Master Teacher may be earned by students who satisfactorily complete the required courses listed below with a grade of “C” or better. This coursework meets the requirements for the Child Development Permit, Master Teacher.

Child Development Master Teacher: Infant Toddler

Required Courses: 9 units

Course Number	Title	Units
CHDV B13c	Child Growth and Development: The Infant Toddler Years	3.0
CHDV B53a	Early Childhood Education: Adult Supervision	2.0
CHDV B44	Infant/Toddler Care and Development	2.0
CHDV B44L	Supervised field experience for Infant/Toddler Care and Development	2.0

Child Development Master Teacher: School Age

Required Courses: 8 units

Course Number	Title	Units
CHDV B53a	Early Childhood Education: Adult Supervision	2.0
CHDV B13b	Child Growth and Development: The School Age Child & Adolescent	3.0

Select 3 units from the following:

CHDV B68a	Ages and Stages of Development of the School Age Child	1.0
CHDV B68b	Curriculum I: School Age Child	1.0
CHDV B68c	Curriculum II: School Age Child	1.0
CHDV B68e	Discipline for School Age Children and Adolescents	1.0

Child Development Master Teacher: Preschool Programming

Required Courses: 8 units

Course Number	Title	Units
CHDV B53a	Early Childhood Education: Adult Supervision	2.0
CHDV B41b	Principles and Practices in Early Childhood Education	2.0
CHDV B41bL	Supervised Field Experience in Early Childhood Education	2.0
CHDV B43	Techniques of Parent Education	2.0

Child Development Master Teacher: Special Education

Required Courses: 8 units

Course Number	Title	Units
CHDV B53a	Early Childhood Education: Adult Supervision	2.0
CHDV B33	Survey of Special Education	3.0
CHDV B52	Care of Infants and Toddlers with Disabilities	3.0

Licensed Family Child Care Provider

Family Child Care Provider I

The Level I Certificate may be earned by students who complete the course Family Child Care Management with a grade of “C” or better.

Required Courses: 1 unit

Course Number	Title	Units
CHDV B257a	Family & Child Care Management	1.0

Family Child Care Provider Level II

The Level II Certificate may be earned by students who satisfactorily complete the 14 units of coursework listed below with a grade of “C” or better. This coursework meets the requirement for the Child Development Associate Teacher Permit and also meets the child development requirement for a fully qualified teacher in a licensed preschool, child development center or school-age center.

Required Courses: 14 units

Course Number	Title	Units
CHDV B257a	Family & Child Care Management	1.0
CHDV B257b	Networking in Family Child Care	1.0
CHDV B20	Introduction to Child Development	3.0
CHDV B36	Developmentally Appropriate Curriculum	3.0
CHDV B40	Creative Art, Movement & Music Activities for Young Children	3.0
CHDV B42	Child, Family and Community	3.0

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: Culinary Arts, Dietetic Services, and Child Nutrition Management.

Upon completion of requirements, the student may apply for a Certificate of Achievement

Child Development Teacher

The Certificate of Achievement may be earned by students who satisfactorily complete 24 units of coursework listed below with a grade of “C” or better. This coursework meets the Child Development requirements for the Child Development Teacher Permit. Students may apply for the Permit at the Kern County Superintendent of Schools, Office of Credentials, 636-4750 or 636-4751. Students must also meet the General Education requirement and Experience requirement in accordance with the California Commission on Teacher Credentialing.

Required Courses: 24 units

Course Number	Title	Units
CHDV B20	Introduction to Child Development	3.0
CHDV B36	Developmentally Appropriate Curriculum	3.0
CHDV B42	Child, Family and Community	3.0
CHDV B49	Child Health, Safety and Nutrition	3.0
CHDV B13a	Child Growth and Development	3.0
CHDV B40	Creative Art, Movement, & Music Activities For Young Children	3.0

CHDV B32	Anti-Bias/Multicultural Approach to Education of Young Children	2.0
CHDV B41a	Principles and Practices in Early Childhood Education	2.0
CHDV B41aL	Supervised Field Experience in Early Childhood Education	2.0

Child Nutrition Management Certificate

Program emphasizes quality food production, production records, nutrition standards and student service in child nutrition programs including public and private schools, child-care centers and day-care centers.

A Certificate of Achievement may be earned by students who satisfactorily complete 24 units from the courses listed below with a minimum grade of “C” in all required courses. The Professional Management Development Program is also available from the National Restaurant Association.

Required Courses: 24 units

Course Number	Title	Units
FDSV B50	Introduction to the Foodservice Industry	2.0
FDSV B52	Foodservice Sanitation and Safety	2.0
FDSV B53 or FDSV B55a & FDSV B55c & FDSV B66	Basic Skills: Basic Foods	2.0
FDSV B55a & FDSV B55c & FDSV B66	Foodservice Production I (2.5)	
FDSV B55c & FDSV B66	Foodservice Production Laboratory (2.0)	
FDSV B66	Menu Design for Child Nutrition Programs	3.0
NUTR B10	Elementary Nutrition	3.0
FACE B248ab or FACE B249ab	Cooperative Work Experience Education	2.0
ENGL	English Course	3.0
COMS	Computer Studies Course	1.0-3.0

Electives: at least 1.5 to 9 units

Course Number	Title	Units
FDSV B55a	Foodservice Production I	2.5
FDSV B55b	Foodservice Production II	2.5
FDSV B55c	Foodservice Production Laboratory	2.0
FDSV B55d	Foodservice Production Laboratory	2.0
FDSV B57	Purchasing	3.0
FDSV B58	Supervisory Techniques	3.0
FDSV B59	Foodservice Production Management	3.0
FDSV B67	Child Nutrition Program Management	3.0
FDSV B70	Topics in Foodservice and Nutrition	.5-1.0

Culinary Arts Certificate

Program emphasizes quality food production and service in commercial and institutional foodservice operations. Course work includes practical training in the campus restaurant, the Renegade Room.

A Certificate of Achievement may be earned by students who satisfactorily complete 25 units from the courses listed below with a minimum grade of “C” in all required courses. The Professional Management Development Program is also available from the National Restaurant Association.

Required Courses: 25 units

Course Number	Title	Units
FDSV B50	Introduction to the Foodservice Industry	2.0
FDSV B52	Foodservice Sanitation and Safety	2.0
FDSV B55a	Foodservice Production I	2.5
FDSV B55b	Foodservice Production II	2.5
FDSV B55c	Foodservice Production Laboratory	2.0
FDSV B55d	Foodservice Production Laboratory	2.0
NUTR B10	Elementary Nutrition	3.0
FDSV B57 or FDSV B58	Purchasing Foodservice Supervision	3.0
FACE B248ab or FACE B249ab	Cooperative Work Experience Education	2.0
COMS	Computer Studies Course	1.0-3.0
ENGL	English Course	3.0

Dietetic Services Certificate

Program provides training for students planning employment in the foodservice department of a health care operation. Courses in this program meet State of California Department of Health Services certification requirements. Consult with a member of the Foods and Nutrition Program staff before scheduling courses in the program. At this time appropriate clinical field experience will be planned.

A Certificate of Achievement may be earned by students who satisfactorily complete 24.5 units from the courses listed below with a minimum grade of “C” in all required courses. The Professional Management Development Program is also available from the National Restaurant Association.

Required Courses: 24.5 units

Course Number	Title	Units
FDSV B50	Introduction to the Foodservice Industry	2.0
FDSV B52	Foodservice Sanitation and Safety	2.0
FDSV B55a	Foodservice Production I	2.5
FDSV B55c	Foodservice Production Laboratory	2.0
NUTR B10	Elementary Nutrition	3.0
FDSV B58	Foodservice Supervision	3.0
FDSV B59	Food Production Management	3.0
FDSV B64a	Clinical Work Experience in Health Care Facilities - Diet Therapy	2.0
FDSV B64b	Clinical Work Experience in Health Care Facilities - Management	2.0
NUTR B50	Nutrition and Diet Therapy	2.0
COMS	Computer Studies Course	1.0-3.0

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 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

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 Child Development Teacher Permit.

Required Courses: 24 units

Course Number	Title	Units
CHDV B36	Developmentally Appropriate Curriculum	3.0
CHDV B42	Child, Family and Community	3.0
CHDV B20	Introduction to Child Development	3.0
CHDV B49	Child Health, Safety and Nutrition	3.0
CHDV B13a	Child Growth and Development	3.0
CHDV B40	Creative Art, Movement & Music Activities for Young Children	3.0
CHDV B32	Anti-Bias/Multicultural Approach to Education of Young Children	2.0
CHDV B41a	Principles and Practices in Early Childhood Education	2.0
CHDV B41aL	Supervised Field Experience in Early Childhood Education	2.0

Student Waiver of CHDV B41aL: A student who is unable to complete CHDV B41AL due to employment obligations, may, with written department permission, substitute CHDV B41B. A letter from the employer will be required indicating that the student is employed in a licensed child development program or licensed family child care home. This letter should also verify the student’s days completed toward the Experience Requirement as indicated on the Child Development Permit Matrix (175 days of 3 or more hours per day, within the past 4 year period.)

Foods/Nutrition Program

An Associate in Science Degree shall be earned by students who satisfactorily complete one of the following program options listed below. General requirements for an Associate in Science degree shall be met as specified in the graduation section of the current catalog. Students should consult with a counselor to plan their educational plan for the program option that meets their personal needs and career objectives. The Professional Management Development Program is also available from the National Restaurant Association.

Child Nutrition Program Management Option

Required Courses: 30 units

Course Number	Title	Units
FDSV B50	Introduction to the Foodservice Industry	2.0
FDSV B52	Foodservice Sanitation and Safety	2.0
FDSV B55a	Foodservice Production I	2.5
FDSV B55c	Foodservice Production Laboratory	2.0
FDSV B58	Supervisory Techniques	3.0
FDSV B66	Menu Design for Child Nutrition Programs	3.0
FDSV B67	Child Nutrition Program Management	3.0
NUTR B10	Elementary Nutrition	3.0

FACE B248ab or FACE B249ab COMS	Cooperative Work Experience Education Cooperative Work Experience Education Computer Studies Course	2.0 1.0-3.0
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Electives: at least 10.5 to 12.5 units

Course Number	Title	Units
FDSV B55b	Foodservice Production II	2.5
FDSV B55d	Foodservice Production Laboratory	2.0
FDSV B57	Purchasing	3.0
FDSV B59	Foodservice Production Management	3.0
FDSV B60	Cost Control	3.0
FDSV B70	Topics in Foodservice and Nutrition	.5-1.0
MGMT B75	Managing Cultural Diversity in the Workplace	3.0

Foodservice Management Option

Required Courses: 30 units

Course Number	Title	Units
FDSV B50	Introduction to the Foodservice Industry	2.0
FDSV B52	Foodservice Sanitation and Safety	2.0
FDSV B55a	Foodservice Production I	2.5
FDSV B55c	Foodservice Production Laboratory	2.0
FDSV B57 or FDSV B58	Purchasing Foodservice Supervision	3.0
NUTR B10	Elementary Nutrition	3.0
FACE B248ab or FACE B249ab COMS	Cooperative Work Experience Education Cooperative Work Experience Education Computer Studies Course	2.0 1.0-3.0

Electives: at least 10.5 - 12.5 units

Course Number	Title	Units
FDSV B55b	Foodservice Production II	2.5
FDSV B55d	Foodservice Production Laboratory	2.0
FDSV B55e	danced Foodservice Practicum	3.0
FDSV B57	Purchasing	3.0
FDSV B58	Supervisory Techniques	3.0
FDSV B59	Foodservice Production Management	3.0
FDSV B60	Cost Control	3.0
FDSV B70	Topics in Foodservice and Nutrition	.5-1.0
ACCT B53a	Introduction to Accounting I	3.0
BSAD B18a	Business Law	3.0
MGMT B48	Small Business Management	3.0
MGMT B75	Managing Cultural Diversity in the Workplace	3.0
MKTG B1	Fundamentals of Marketing	3.0

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designa-

tion, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

CHILD DEVELOPMENT

Credit limitations may apply. For specific information see a counselor or the transfer institution.

(DSS) at the end of some course descriptions refers to California Department of Social Services categories under Title 22.

CHDV B10 A Time to Grow (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. **Recommended:** Reading Level 5 or 6. **Hours:** (54) Contact hours. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

CHDV B13a Child Growth and Development (3 units)

Developing child from conception through age six. Includes major theories of emotional, social, physical, and cognitive development. **Recommended:** Reading Level 5 or 6. **Hours:** (72) 3 lect, 1 hour per week observation. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges. (DSS 1)

CHDV B13b Child Growth and Development: The School Age Child and Adolescent (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:** CHDV B13a with a grade of "C." **Hours:** (72) 3 lect, 1 hour per week observation. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges. (DSS 1 and 5)

CHDV B13c Child Growth and Development: The Infant Toddler Years (3 units)

Study of theory, research, cognitive and sensory development of the Infant Toddler Years. Class will look at mother-child interactions as well as role of caregivers along with age appropriate curriculum and infant programs. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. Field trips required. **Offered:** F,S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only. (DSS 4)

CHDV B20 Introduction to Child Development (3 units)

Introduction to the history, philosophy and theories of education of young children, Career and educational program

planning. Explains credential and license requirements. Emphasizes different techniques of observation and recording observations of young children. Communicating to parents the value of age appropriate activities. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. (DSS 1, 3) **Note:** Formerly part of CHDV B54.

CHDV B32 The Anti-Bias/Multicultural Approach to Education of Young Children (2 units)

The relationship between critical aspects of culture and the social-emotional development of children, adolescents and adults is analyzed from an anti-bias, multicultural perspective. Diversity is examined through the different values, beliefs, modes of communicating, behaving and perceiving the world. **Recommended:** Reading Level 5 or 6. **Hours:** (36) 2 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. (DSS 3)

CHDV B33 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. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. (DSS 3)

CHDV B35a Understanding the Emotionally Challenged 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. **Hours:** (18) 2 lect for 9 weeks. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. (DSS 3)

CHDV B35b 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. **Hours:** (18) 2 lect for 9 weeks. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

CHDV B35c 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. **Hours:** (18) 2 lect for 9 weeks. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

CHDV B35d Understanding the Physically Challenged Child (1 unit)

Studies physical disabilities of children and the characteristics of those handicaps. Explains inclusion and those responsibilities of teacher, parent, and specialist. **Hours:** (18) 2 lect for 9 weeks. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

CHDV B35e Working with the Autistic Child (1 unit)

Characteristics, theories, treatment methods, curriculum, family involvement, and service models available to autistic children. **Hours:** (18) 2 lect for 9 weeks. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

CHDV B36 Developmentally Appropriate Curriculum (3 units)

Planning for and implementation of developmentally appropriate curriculum for children ages birth – 8 years. Includes major concepts and theories of child growth and development for children in infant/toddler, preschool, kindergarten and early primary grades. Students will be expected to observe and assess classroom environments using their knowledge of developmentally appropriate practices. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. (DSS 3)

CHDV B40 Creative Art, Movement, and Music Activities for Young Children (3 units)

Materials, methods, and objectives in teaching art, movement, and music activities for children birth to six years old. The growth of creativity through developmentally appropriate activities, and communicating to parents the value of play will be emphasized. Meets Child Development Associated Options, competencies numbers 4 and 7. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/demo. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. (DSS3) **Note:** Elective credit only.

CHDV B40d 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 story telling, books, puppets, and nature. **Recommended:** Reading Level 5 or 6. **Hours:** (36) 2 lect/demo. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. (DSS 5)

CHDV B41a 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. **Prerequisites:** CHDV B13a with a grade of "C" and concurrent enrollment in CHDV B41aL. **Recommended:** At least one of the CHDV B40 series strongly recommended. **Hours:** (36) 2 lect./disc. **Offered:** F, S. **CCS:**

Occupational Education. **Transferable:** CSU and private colleges. (DSS 3)

CHDV B41aL Supervised Field Experience in Early Childhood Education (2 units)

Supervised internship experience working with children two to five years of age in the Child Study Centers applying knowledge gained in CHDV B41a. **Prerequisite:** CHDV B13a with a grade of "C" and concurrent enrollment in CHDV B41a. **Hours:** (108) 6 lab. **Offered:** F, S, SS. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. (DSS 3)

CHDV B41b Principles and Practices in Early Childhood Education (2 units)

Advanced skills and knowledge for early childhood programs. Planning learning experiences and developing teaching materials appropriate to the physical, cognitive, social and emotional growth of the young child aged two to five. **Prerequisites:** CHDV B41a with a grade of "C" and concurrent enrollment in CHDV B41bL. **Hours:** (36) 2 lect/disc. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. (DSS 3)

CHDV B41bL Supervised Field Experience in Early Childhood Education (2 units)

Advanced internship experience and practice teaching in early childhood programs. Emphasizes curriculum and activity planning, and teaching techniques for three to five year olds. **Prerequisite:** CHDV B41aL with a grade of "C" and concurrent enrollment in CHDV B41b. **Hours:** (108) 6 lab. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. (DSS 3)

CHDV B42 Child, Family and the Community (3 units)

Socialization of children in developmental, family and community contexts, with a focus on child rearing, child caring, and early education. **Recommended:** CHDV B13a with a grade of "C" or concurrent enrollment in CHDV B13a, Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges. (DSS 2)

CHDV B43 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. **Recommended:** Reading Level 5 or 6. **Hours:** (36) 2 lect. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

CHDV B44 Infant/Toddler Care and Development (2 units)

Infant/toddler development - physical, emotional, social and intellectual. Principles of child care, nutrition, health prac-

tices, and curriculum for children ages birth through two years. **Prerequisites:** CHDV B13a with a grade of "C" and concurrent enrollment in CHDV B44L. **Hours:** (36) 2 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. (DSS 4)

CHDV B44L Supervised Field Experience for Infant/Toddler Care and Development (2 units)

Supervised field experience in an infant/toddler center. Application of knowledge gained in CHDV B44. Class discussion of experiences with infants and toddlers in the Child Study Center. **Prerequisites:** CHDV B13a with a grade of "C." Concurrent enrollment in CHDV B44. **Hours:** (126) 1 lect/disc, 6 lab. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Elective credit only. (DSS 4)

CHDV B45a Administration of Programs for Young Children: Business Procedures (3 units)

Administration of programs for young children including private and publicly-funded child care centers and preschool programs. Emphasizes business procedures and public policy. **Recommended:** CHDV B41a and CHDV B41b with a grade of "C." **Hours:** (54) 3 lect. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Elective Credit only. (DSS 6)

CHDV B45b Administration of Programs for Young Children: Personnel Management Procedures (3 units)

Administration of programs for young children including private and publicly-funded child care centers and preschool programs. Emphasizes personnel management and public policy. **Recommended:** CHDV B41a and CHDV B41b with a grade of "C." **Hours:** (54) 3 lect. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Elective credit only. (DSS 6)

CHDV B46 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. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

CHDV B47 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 system for such children. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc.

CCS: Occupational Education. **Transferable:** CSU and private colleges.

CHDV B48 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.

Recommended: Reading Level 5 or 6. **Hours:** (72) 3 lect, 1 hr. observation by arrangement. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

CHDV B49 Child Health, Safety and Nutrition (3 units)

For parents, aides, teachers, and directors of child care facilities. Addresses biological, psychological and sociological needs, assessments, issues, policies, procedures and how they impact a child's development. Emphasis is placed on demonstration and application of course content within the family and community. Pediatric CPR and First Aid certification is completed (books and certification costs are at the student's expense). Totally fulfills California licensing mandate of 15 hours of training in preventative health practices. **Recommended:** Reading Level 5. **Hours:** (54) 3 lect/disc. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. (DSS 7)

CHDV B50a Health and Safety for Young Children (0.5 unit)

Health and safety for parents and child care givers. American Red Cross Child Care Course certification for: A. Preventing Childhood injuries, C. Preventing infectious Diseases, D. Caring for ill children. (Students responsible for costs of American Red Cross books and certification.) Partially fulfills the state childcare licensing mandate of 15 hours of preventive health practices training. **Recommended:** Reading Level 5 or 6. **Hours:** (9) 3 lect/disc for 3 weeks. **Repeat:** 3 for recertification. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CHDV B50b Infant & Child First Aid-B (0.5 unit)

A plan to follow when a child is injured. Includes actions to take before and after an emergency including bandaging. American Red Cross certification for Infant and Child First Aid. Designed for ERA and Family Day Care students and other child care givers. (Students are responsible for costs of books and certification.) Fulfills the state child care licensing mandate of training for Pediatric First Aid. **Hours:** (9) 3 lect/disc for 3 weeks. **Repeat:** 3 for recertification. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CHDV B50c Infant & Child CPR (0.5 unit)

How to recognize and respond to a cardiopulmonary emergency. American Red Cross certification for Infant and Child CPR. Designed for ERA and Family Day Care students and all child care givers. (Students are responsible for costs of

books and certification.) Fulfills the state child care licensing mandate of training for Pediatric CPR. **Hours:** (9) 3 lect/disc for 3 weeks. **Repeat:** 3 for recertification. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CHDV B50e Understanding Development, Communication and Recognition of Abuse of Young Children (0.5 unit)

Child development for parents and child care givers. American Red Cross Child Care Course certification for: E. Learning About Child Development; F. Communicating with Children and Parents; G. Recognizing and Reporting Child Abuse. (Students are responsible for costs of American Red Cross books and certification.) Partially fulfills state child care licensing mandate of 15 hours of training in preventive health. **Recommended:** Reading Level 5 or 6. **Hours:** (9) 3 lect/disc for 3 weeks. **Repeat:** 3 for recertification. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CHDV B51 Working with Children Prenatally Substance Exposed (2 units)

Designed to train early childhood and family child care professionals in teaching and caring for children prenatally substance exposed and in forming partnerships with their families. **Hours:** (36) 2 lect/disc. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CHDV B52 Care of Infants and Toddlers with Disabilities (3 units)

Interdisciplinary course designed to prepare child care workers and education aides to care for disabled and chronically ill infants and toddlers. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CHDV B53a Early Childhood Education: Adult Supervision (2 units)

A study of the methods and principles of supervising and teaching adults in early childhood classrooms. Emphasis is on the role of experienced classroom teachers who function as a supervisor and/or mentor for staff or new teachers in a child care environment while simultaneously addressing the needs of children and parents. **Recommended:** Reading Level 5 or 6. **Hours:** (36) 2 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. (DSS 6)

CHDV B53b Mentor Seminar (0.5 unit)

Intended for persons who have been certified through the California Mentor Teacher Program. Discussion of issues related to their role as supervisors of early childhood student teachers. **Prerequisite:** Completion of CHDV B53a with a grade of "C." **Hours:** (9) by arrangement. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CHDV B53c Early Childhood Mentor Training Director Seminar (0.5 unit)

Intended for persons who have been certified through the California Mentor Director Program. Discussion of issues related to their role as supervisors of early childhood directors. **Prerequisite:** CHDV B53a with a grade of "C." **Hours:** (9) by arrangement. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CHDV B55 Reducing Exceptional Stress and Trauma for Young Children (2 units)

Development of curriculum and intervention guidelines to help young children deal with stress and trauma. Included are working with mental health networks and parents to help children cope with fire, earthquake, floods, lack of safety, civil unrest, crimes against children, and death. **Recommended:** Reading Level 5 or 6. **Hours:** (36) 2 lect/disc. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. (DSS 3)

CHDV B56 Parenting (3 units)

Parental attitudes, communication skills, and discipline methods will be explored in a "hands-on" approach. Social, psychological, economic and cultural forces, including the impact of immigration and acculturation on parenting styles. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CHDV B57 Creative Use of Literature with Young Children (2 units)

Designed to give early childhood educators skills to select and read aloud books to children birth through age eight. Developing language, meeting children's personal needs, celebrating diversity, motivating the love of reading and learning will be stressed as benefits of children's literature. **Recommended:** Reading Level 5 or 6. **Hours:** (36) 2 lect/disc. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. (DSS 3)

CHDV B60b Infant and Child First Aid (1 unit)

Learn steps to follow for over 55 types of injuries. Includes prevention, actions to take after an emergency and how to give first aid and bandaging. Introduction to the Internet with consumer level anatomy and physiology. American Red Cross certification for Pediatric First Aid. For parents, foster parents, child care and medical professionals, teachers, teacher's aides and all care givers. (Students are responsible for costs of books and certification.) Fulfills the state childcare licensing mandate of training for Pediatric First Aid. **Hours:** (18) 3 lect/disc for 6 weeks. **Repeat:** 3 for recertification. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CHDV B60c Infant and Child CPR (1 unit)

How to recognize and respond to a cardiopulmonary emergency. Introduction to the Internet with consumer level

anatomy and physiology. Disaster planning for home and child care facilities. American Red Cross certification for Infant and Child CPR. For parents, foster parents, child care and medical professionals, teachers, teacher's aides and all care givers. (Students are responsible for costs of books and certification.) Fulfills the state childcare licensing mandate of training for Pediatric CPR. **Hours:** (18) 3 lect/disc for 6 weeks. **Repeat:** 3 for recertification. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CHDV B68 Topics in Extended Day Care for School Age Children (1 unit)

Current information for working with the school age child. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 18 lect/disc. **CCS:** Occupational Education. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. (DSS 5)

CHDV B68a 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.

CHDV B68b 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.

CHDV B68c 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.

CHDV B68e Discipline for School-Age Children and Adolescents

History, culture and the origin of discipline. Communication and problem-solving skills emphasized. **Hours:** (18) 2 lect for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CHDV B70 Topics in Child Development (0.5-1 unit)

Current information on child development issues and curricula. Recommended as update courses for licensed teachers. **Recommended:** Reading Level 5 or 6. **Hours:** (9-18) 9-18 lect/disc. **Repeat:** Repeat as indicated. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. (DSS 3)

CHDV B70a Planning Activities for Infants and Toddlers

CHDV B70b Preschool Curriculum for Parents
Repeat: 3. **Offered:** F, S.

CHDV B70c Use of Puppets in the Classroom**CHDV B70d Discipline Techniques for Preschool Children****CHDV B70e Infant Care****Repeat:** 3. **Offered:** F, S.**CHDV B70f Toddler Care****Repeat:** 3. **Offered:** F, S.**CHDV B70g Piagetian Activity****CHDV B70h Science for Young Children****CHDV B70i Technology and Young Children****CHDV B70j Communicating with Children About Sexuality****CHDV B70k Literature Enrichment Activities****Repeat:** 1.**CHDV B70L Dramatic Play****Repeat:** 1.**CHDV B70m Creative Learning Environment - Inside****CHDV B70n Creative Learning Environment - Outside****CHDV B70q Math and Number Concepts****CHDV B70s Activities for Nutrition of Infants/Toddlers****CHDV B70v Legal and Ethical Issues of Child Development****CHDV B 70z Continuing Professional Development.****CHDV B74 Orientation to Early Childhood Educator Employment Readiness Academy (1 unit)**

Orientation to employment readiness in Early Childhood Education, including job readiness skills, curricular areas, and interpersonal communication. **Hours:** (18) 6 lect/disc for 3 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CHDV B75 Child Development Internship (1-3 units)

Provides a supervised internship working with children birth through age eight for students not yet eligible to enroll in laboratory classes, or for those needing to acquire days of experience for a Child Development Permit. Emphasizes skills needed to be a team player, guidance techniques, and developmentally and culturally appropriate curriculum.

Hours: (90-270) 5-15 lab. Field trips required. **Offered:** F, S,

SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

CHDV B196 Strategic Learning System (2 units)

Students learn to use a complete learning system that incorporates strategies for understanding, integrating and remembering information from texts and lectures as well as strategies to prepare for and take tests. Prerequisites: Reading Level 5 or satisfactory completion of ACDV B62 and concurrent enrollment in designated lecture course coordinated with ACDV B196. Recommended: English Level 4 or satisfactory completion of ACDV B68/B75 or ENSL B3. Hours: (42) 3 lect/disc for 14 weeks. Offered: F, S. Repeat: 1. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable. Note: Not open to students who have taken the equivalent course, ACDV B196.

CHDV B257a Family & Child Care Management (1 unit)

Training for new and existing family child care providers to develop a quality program, including business aspects, health and safety requirements, environment and developmentally appropriate activities. **Hours:** (18) 6 lect/disc for 3 weeks. Open entry/open exit. Field trips may be required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CHDV B257b Networking in Family Child Care (1 unit)

Attendance and participation in selected and approved community events as well as community based lecture/discussions on current issues affecting Family Child Care Homes. **Hours:** (18) 9 lect/disc by arrangement; 9 hours lab by arrangement. **Repeat:** 3. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CHDV B257L Laboratory for Family Child Care/Education (2 units)

Supervised laboratory experience caring for and teaching children infant through twelve years of age in a California Department of Social Services licensed Family Child Care Home. **Prerequisite:** CHDV B257a and CHDV B257b (may be taken concurrently). **Hours:** (108) 108 by arrangement. Open entry/open exit. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FAMILY AND CONSUMER EDUCATION

Credit limitations may apply. For specific information see a counselor or the transfer institution.

FACE B248ab Cooperative Work Experience Education (1-8 units. Limit 16 units)

See WEXP B248ab description.

FACE B249ab Cooperative Work Experience Education (1-4 units. Limit 16 units)

See WEXP B249ab description.

FAMILY STUDIES

Credit limitations may apply. For specific information see a counselor or the transfer institution.

FAMS B90 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. **Hours:** (3-54) 3 lect, 1-18 weeks. **CCS:** Community Education - Parenting. **Not Transferable:** Not degree applicable.

FOOD SERVICE

Credit limitations may apply. For specific information see a counselor or the transfer institution.

FDSV B50 Introduction to the Foodservice Industry (2 units)

An introduction to the foodservice industry including history, trends, organization and job opportunities. Entry skills to be taught include communication techniques, terminology, work simplification, application of computational skills, safety procedures, time management, equipment identification and operation, and knife skills and cutting techniques. Provides career and educational program planning. Satisfies the 0.5 counseling requirement for graduation from Bakersfield College. **Recommended:** Reading Level 5 or 6. **Hours:** (36) 2 lect. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FDSV B52 Foodservice Sanitation and Safety (2 units)

Basic principles of sanitation and safety standards set by regulatory agencies. Causes and prevention of food-borne illnesses. Application of food safety production and service, personal hygiene and facilities maintenance procedures. Food safety regulations and inspections including HACCP system are emphasized. Course meets the minimum food safety certification requirements of California legislation effective January 1, 2000. Upon passing the required exam, course certificate of completion is awarded from the Education Foundation of the National Restaurant Association. **Recommended:** Reading Level 5 or 6. **Hours:** (36) 2 lect/disc. Field trips may be required. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FDSV B53 Basic Skills: Basic Foods (2 units)

Basic principles and techniques involved in food preparation and service for child nutrition programs, including schools, child care centers, and family day care homes. Uniforms are required. **Recommended:** Reading Level 5 or 6. **Hours:** (72) 1 lect, 3 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FDSV B55a Foodservice Production I (2.5 units)

Basic principles and techniques involved in commercial and non-commercial food production. Emphasizes recipe standardization, equipment and sanitation/safety principles.

Cookery principles relating to stocks, sauces, soups, meats, vegetables, and salads. **Prerequisite:** Concurrent enrollment in FDSV B55c or 55d. **Hours:** (45) 2.5 lect. Field trips may be required. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FDSV B55b Foodservice Production II (2.5 units)

Basic principles and techniques involved in commercial and non-commercial food production. Emphasizes nutritional standards, equipment, and sanitation/safety principles. Cookery principles relating to poultry, fish and shellfish, sandwiches, hors d'oeuvres, breakfast cookery, and bakery. **Hours:** (45) 2.5 lect. Field trips may be required. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FDSV B55c Foodservice Production Laboratory (2 units)

Practical experiences in the preparation of foods typical to a dinner house/ala carte menu in the campus restaurant. Work station rotations in kitchen and dining room with emphasis on professional skill development, work ethics and presentation skills for plate service. Uniforms are required. **Prerequisite:** Concurrent enrollment in FDSV B55a or B55b. **Hours:** (108) 6 lab. Field trips may be required. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FDSV B55d Foodservice Production Laboratory (2 units)

Practical experiences in the preparation of buffets and garde manger in the campus restaurant. Work station rotations in the kitchen and dining room with emphasis on professional skill development, work ethics and presentation skills for buffet service. Uniforms are required. **Prerequisite:** Concurrent enrollment in FDSV B55a or B55b. **Hours:** (108) 6 lab. Field trips may be required. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FDSV B55e Advanced Foodservice Practicum (3 units)

Practicum application of acquired knowledge, skills, work ethics, and technology in developing a broader understanding of production, service and management functions in on-campus and off-campus foodservice operations. Uniforms are required. Transportation provided by the student. Practicum sites must be approved by their instructor. **Prerequisite:** FDSV B52, B55a, B55b, B55c and B58. **Recommended:** NUTR B10 and Reading Level 5 or 6. **Hours:** (126) 18 disc/seminar and 108 practicum. Field trips may be required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FDSV B57 Purchasing (3 units)

Discussion of the food purchasing activity for foodservice operations and product information from a managerial perspective. Emphasis on purchasing policies and procedures, principles of selection and procurement and standard pur-

chase specifications. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. Field trips may be required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FDSV B58 Supervision in the Hospitality Industry (3 units)

Emphasizes basic knowledge of the first-line hospitality supervisor's role and responsibilities. Principles of good people management are presented in terms of how they apply on the job. Topics include communications, motivation and work climate, job descriptions, recruitment and selection, performance evaluations, employee discipline, planning, decision making and problem solving, delegation and controlling. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. Field trips may be required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FDSV B59 Food Production Management (3 units)

Course provides a basic understanding of food production, kitchen management, and quality control for all segments of the foodservice industry. **Prerequisite:** FDSV B52, B55a, B55b, and B55c or B55d. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. Field trips may be required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FDSV B60 Cost Control for Foodservice Managers (3 units)

Basic principles of cost control for foodservice managers. Application of basic accounting procedures to cost control. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. Field trips may be required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FDSV B64a Clinical Work Experience in Health Care Facilities - Diet Therapy (2 units)

Role and responsibilities of the dietetic service supervisor in health care and community foodservice operations. Application of standards, principles and techniques of basic nutrition, diet therapy, nutrition assessment, patient nutrition education and patient/staff communications. Course provides 90 hours directed unpaid clinical work experience in an approved health care facility. **Prerequisite:** NUTR B10 and completion of or enrollment in NUTR B50. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 5 directed clinical work experience. Field trips may be required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FDSV B64b Clinical Work Experience in Health Care Facilities - Management (2 units)

Role and responsibilities of the dietetic service supervisor in health care and community foodservice operations. Application of standards, principles and techniques of leadership and human relations; personnel selection and supervision; fiscal management; evaluation of dietary services; food production and service; purchasing; and sanitation and safety. Course

provides 90 hours directed work experience in approved health care facilities. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 5 clinical directed work experience. Field trips may be required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FDSV B66 Food Based Menu Planning for Child Nutrition Programs (3 units)

Basic principles and procedures of menu planning for Child Nutrition Programs to meet the requirements of the School Meals Initiative for Healthy Children emphasizing food based menu planning. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. Field trips may be required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FDSV B67 Child Nutrition Program Management (3 units)

Emphasis on knowledge and skills required by site manager in elementary and high school programs to manage a nutritionally sound, cost effective child nutrition program. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. Field trips may be required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FDSV B70a Basic Professional Baking (1 unit)

Commercial production of baked products including yeast breads, quick breads, pies, fruit desserts, cookies and cakes. Decorative work and product presentation are demonstrated. Uniforms are required. **Recommended:** Reading Level 5 or 6. **Hours:** (36) 1 lect, 3 lab. for 9 weeks. Field trips may be required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FDSV B70b Professional Table Service (1 unit)

A skills development course covering table settings, types of service, serving techniques, dining room equipment, sales techniques and customer relations. Demonstrations will be presented. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 2 lect for 9 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FDSV B70c Advanced Professional Baking (1 unit)

Commercial production of puff pastry, European-style tortes and cakes, strudels, fruit tarts, bavarians and mousses, basic sauces and fillings, and decorative work and display pieces. Uniforms are required. **Prerequisite:** FDSV B70a. **Hours:** (36) 1 lect, 3 lab for 9 weeks. Field trips may be required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FDSV B71 Servsafe Certification (0.5 unit)

Basic principles and procedures of food safety training including prevention of food-related illnesses and the development and implementation of food safety systems in food facilities. Course is designed for managers and employees to meet/renew the minimum food safety certification require-

ments of California legislation effective January 1, 2000. Certificate of completion is awarded from the Educational Foundation of the National Restaurant Associate upon passing the required exam. **Recommended:** Reading Level 5 or 6. **Hours:** (9) 3 lect/disc for 3 weeks. **Repeat:** As needed for mandated training. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable. **Note:** Course does not satisfy FDSV B52 requirement for certificate/degree Foods/Nutrition Program options.

GERONTOLOGY

Other Gerontology courses are listed in the Behavioral Science and Family and Consumer Education Departments

GERO B40 Nutrition In Aging (3 units)

Examines the physiological and sociological aspects of aging as they affect nutritional needs. Contents include: theories of aging, understanding natural life process, newly revised nutritional needs of older adults, food habits of ethnic and racial groups, nutritional implications when combined with various drugs, active versus frail adult needs, acute and chronic diseases, awareness of opportunities, challenges and creative approaches for delivering quality food and nutrition services in varied situations such as nutrition centers. **Recommended:** Reading level 5. Concurrent enrollment in NUTR B255 or evaluation by instructor of experience with dietetic calculations. **Hours:** Independent Study. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Elective credit only.

GERO B255 Nutrition Computer Lab (1 unit)

Provides supervised laboratory time during which students may obtain hands-on-experience getting practice using a diet analysis software program to compute nutritional assessments. **Prerequisite:** Concurrent enrollment in NUTR B10 or GERO B40. **Hours:** Independent Study. Open entry/open exit. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent course, NUTR B255.

NUTRITION

Credit limitations may apply. For specific information see a counselor or the transfer institution.

NUTR B10 Elementary Nutrition (3 units)

Basic concepts and principles of nutrition with application to current nutrition issues. Emphasizes improvement of personal health through proper eating habits. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. Field trips may be required. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges. (CAN FCS 2)

NUTR B50 Nutrition and Diet Therapy (2 units)

Nutrition care for acute illnesses and chronic diseases. Related normal and abnormal physiology, nutrition assessment and care plans and client education techniques are emphasized. **Prerequisite:** NUTR B10 with a grade of "C."

Recommended: Reading Level 5 or 6. **Hours:** (36) 2 lect/disc. Field trips may be required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

NUTR B255 Nutrition Computer Lab (1 unit)

Provides supervised laboratory time during which students may obtain hands-on-experience getting practice using a diet analysis software program to compute nutritional assessments. **Prerequisite:** Concurrent enrollment in NUTR B10 or GERO B40. **Hours:** Independent Study.. Open entry/open exit. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent course, GERO B255.

Foreign Languages

American Sign Language

English As A Second Language

French

Japanese

German

Spanish

Russian

ASSOCIATE IN ARTS DEGREE PROGRAMS

Bakersfield College offers the Associate in Arts Degree in the following areas: American Sign Language (ASL), French, German and Spanish.

American Sign Language

The major in American Sign Language provides a linguistic and grammatical study of the language and an in-depth look into the culture of deaf people. Students should check with the receiving institution to ensure transferability of ASL courses as foreign language credit.

Required Courses: 24 units

Course Number	Title	Units
ASL B1	American Sign Language I	4.0
ASL B2	American Sign Language II	4.0
ASL B3	Advanced American Sign Language Part 1	4.0
*ASL B4	Advanced American Sign Language Part 2	3.0
*ASL B5	Sign Language Interpreting	3.0
ASL B6	American Deaf Culture	3.0
ASL B7	Sign and Song	3.0

***Note:** Deaf students only may use THEA B1 and CHDV B13a in place of ASL B4 and ASL B5.

French

Required Courses: 18 units

Course Number	Title	Units
FREN B1	Elementary French	5.0
FREN B2	Elementary French	5.0
FREN B3	Intermediate French	4.0
FREN B4	Intermediate French	4.0

Spanish

Required Courses: 18 units

Course Number	Title	Units
SPAN B1ab	Elementary Spanish	5.0
SPAN B2ab	Elementary Spanish	5.0
SPAN B3	Intermediate Spanish	4.0
SPAN B4 or SPAN B10	Intermediate Spanish Spanish for Native Speakers	4.0

The above courses are in addition to the Bakersfield College graduation requirements for the Associate in Arts Degree. Please consult the section in this catalog under "Graduation" for specific requirements.

English As A Second Language (ENSL)

Bakersfield College offers a complete program of courses for the ENSL student, including English, writing, speech, reading and counseling courses at the intermediate and advanced levels.

A comprehensive testing program has been especially designed to ensure that all foreign students are placed in the courses which will best suit their needs. **All ENSL students are urged to take the Bakersfield College English as a Second Language Placement Test.**

An International Student Counselor 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 second language are urged to visit the center and take advantage of the services offered there.

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

AMERICAN SIGN LANGUAGE

ASL B1 American Sign Language I (4 units)

Fundamentals of American Sign Language (A.S.L.). Introduces the historical development of ASL and deaf culture, basic vocabulary and grammatical structure, techniques of signing, and non-verbal aspects of American Sign Language. Outside assignments require practice with video tape programs. **Recommended:** Reading Level 5 or 6. **Hours:** (108) 3 lect, 3 lab. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

ASL B2 American Sign Language II (4 units)

A continued study of the fundamentals of American Sign Language. Emphasizes grammatical structure, vocabulary, conceptual accuracy, placement of signs, fingerspelling and numerical proficiency. Introduces the spectrum of sign language, idiomatic expression, and topical areas relating to deaf culture. Outside assignments require practice with video tape programs. **Prerequisite:** ASL B1. **Hours:** (108) 3 lect, 3 lab. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

ASL B3 Advanced American Sign Language Part 1 (4 units)

Emphasizes advanced conversational fluency in ASL; followed by intensive work on comprehensive skills and grammatical structure. Instruction in conceptual accuracy and translation of English idioms into American Sign Language.

Discussion of various aspects of American deaf culture and dynamics of the deaf community. **Prerequisite:** ASL B2. **Hours:** (108) 3 lect, 3 lab. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

ASL B4 Advanced American Sign Language Part 2 (3 units)

Emphasis is on receptive and expressive conversational fluency and specific linguistic aspects of ASL. Also includes issues pertinent to deaf culture. **Prerequisite:** ASL B3. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ASL B5 Sign Language Interpreting (3 units)

Theory and practice of interpreting is the focus of this introductory course. The history of interpreting, code of ethics and various occupational settings provide students a comprehensive look at the profession of interpreting. Includes practicum experience. **Prerequisite:** ASL B3. **Hours:** (54) 3 lect. Field trips required. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ASL B6 American Deaf Culture (3 units)

Introduction to the philosophical components of American deaf culture, such as types and causes of deafness, and the deaf community as defined according to language, values, culture, and attitudes. Included is a study of deaf advocacy, services, education, and legal rights of deaf people. **Prerequisite:** ASL B1. **Hours:** (54) 3 lect/disc. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

ASL B7 Sign and Song (3 units)

Analyzing and translating lyrics from music into visual concepts. Develops sign clarity, conceptual accuracy, mime and staging techniques. This class will present a community performance. **Prerequisite:** ASL B2. **Hours:** (54) 3 lect/disc. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Elective Credit only.

ASL B56 Selected Topics in ASL (1 unit)

Specialized vocabulary in American Sign Language. Emphasis is on vocabulary used in practical and occupational settings. **Prerequisite:** ASL B1. **Hours:** (18) 3 lect for 6 weeks. **Repeat:** 2 each. **CCS:** Precollegiate - discipline specific. **Not Transferable:** Not degree applicable.

ASL B56a Religious Signs

ASL B56b Medical Signs

ASL B56c Human Sexuality Signs

ASL B56d Social Service Signs

ASL B56e Law Enforcement Signs

ASL B56f Educational Signs

ENGLISH AS A SECOND LANGUAGE

ENSL B1 College Composition (4 units)

Composition course for foreign/bilingual students which provides extensive practice in rhetorical modes of composition and persuasion as well as comprehension and analysis of reading. Stresses both organization and in-depth essay development. Satisfies the General Education requirement in written English for the AA and AS degrees and prepares transfer students for ENGL B1a. **Prerequisites:** ENSL B2 or ENGL B60 with a minimum grade of "C" or "CR." **Hours:** (72) 4 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. **Note:** Elective credit only.

ENSL B2 Advanced Grammar and Composition (4 units)

Writing course for foreign/bilingual students at the advanced level of English who require grammar and composition skills necessary to take essay exams, improve personal and professional writing, or prepare for ENSL B1 or ENGL B1. (A minimum grade of "C" in ENSL B2 will satisfy prerequisite for ENSL B1 and ENGL B1.) **Prerequisites:** ENSL B3 or ACDV B68 with a minimum grade of "C." **Hours:** (72) 4 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. **Note:** Elective credit only.

ENSL B3 Intermediate Grammar and Composition (4 units)

Writing course for foreign/bilingual students at the high-intermediate level of English who require grammar and composition skills necessary to take essay exams, improve personal written communication, or prepare for ENSL B2, ENSL B1, or ENGL B1. **Recommended:** Placement based on the Bakersfield College English as a Second Language Placement Test, ENSL B55ab with a minimum grade of "C." **Hours:** (72) 4 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. **Note:** Elective credit only.

ENSL B11 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 educational planning requirement for graduation from Bakersfield College. **Recommended:** Reading Level 5 or 6. **Hours:** (40.5) 3 lect for 13.5 weeks. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. Elective credit only.

ENSL B21 Pronunciation and Comprehension (3 units)

Advanced pronunciation class for foreign students who are basically fluent in English, with emphasis on dialect or accents. This may include bicultural American students and foreign-born students. **Recommended:** Placement based on Bakersfield College English as a Second Language Placement Test or ENSL B75 and ENSL B71 series. **Hours:** (54) 3 lect/disc. **Repeat:** 1. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. Elective credit only.

ENSL B22 Group Discussion and Conversation (3 units)

Individual prescriptive training for students with problems in pronunciation, stress and intonation in spontaneous speech samples. **Recommended:** ENSL B21. **Hours:** (54) 3 lect/disc. **Repeat:** 1. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. Elective credit only.

ENSL B31 Advanced Reading and Literature (3 units)

Reading course for advanced foreign/bilingual students who require critical reading skills and vocabulary necessary to read and comprehend college level material in English literature. **Recommended:** Placement based on the Bakersfield College English as a Second Language Placement Test, ENSL B51 with a minimum grade of "C." Reading Level 4, or evaluation by instructor of student's reading skills and vocabulary, and ENSL B3 with a minimum grade of "C" or eligibility for ENSL B2 or ENGL B60. **Hours:** (54) 3 lect/disc. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. **Note:** Elective credit only.

ENSL B51 High-Intermediate Reading and Vocabulary (4 units)

Recommended for foreign and bilingual students who need to improve reading comprehension and build vocabulary in English. Emphasis is on looking for main ideas, summarizing, making inferences, vocabulary, using correct grammar patterns with more complex reading selections than in ENSL B61. **Recommended:** ENSL B61, a qualifying score on the ENSL Placement Test, or evaluation of student's reading skills by instructor. **Hours:** (72) 4 lect/disc. **Offered:** F, S. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ENSL B55ab Preparation for Academic Writing (4 units)

Development and control of grammar and usage for foreign and bicultural American students to advance to ENSL B3. Focuses on grammar review, extensive sentence and paragraph writing, and vocabulary and idiom development. **Recommended:** Placement based on the Bakersfield College English as a Second Language Placement Test, ENSL B75ab and ENSL B75cd. **Hours:** (72) 4 lect/disc. **Repeat:** 1. **Offered:** F, S. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ENSL B61 Low-Intermediate Reading and Vocabulary (4 units)

Recommended for foreign and bilingual students who need to improve reading comprehension and build their vocabulary in English. Emphasis is on looking for main ideas, summarizing, making inferences, building vocabulary, and using correct patterns of grammar. **Recommended:** Placement based on the Bakersfield College English as a Second Language Placement Test or ENSL B75cd or ENSL B71ab, ENSL B71cd, or evaluation of student's reading skills by instructor. **Hours:** (72) 4 lect/disc. **Offered:** F, S. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ENSL B65 Intensive Grammar Drill (1-3 units)

Recommended for foreign and bicultural American students who need extra help with verbs, articles and prepositions. Emphasizes intensive oral and written drill. **Recommended:** Placement based on the Bakersfield College English as a Second Language Placement Test or ENSL B75ab, ENSL B75cd or evaluation by any Bakersfield College English instructor. **Hours:** (18-54) 1-3 lect. **Repeat:** 1. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ENSL B71ab Basic Listening and Speaking I (4 units)

B71a-B71b (2-2) equivalent to B71ab. Guided practice for improvement of pronunciation, intonation patterns and aural comprehension of non-native English speakers. **Recommended:** Placement based on Bakersfield College English as a Second Language Placement Test. **Hours:** (36-36) 4 lect/disc. **Repeat:** 1. **Offered:** F. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ENSL B71cd Basic Listening and Speaking II (4 units)

B71c-B71d (2-2) equivalent to B71cd. Improves the pronunciation and intonation patterns of the non-native English speaking person. Aural comprehension in everyday conversational speech and classroom lectures will also be stressed. **Prerequisite:** ENSL B75ab. **Hours:** (36-36) 4 lect/disc. **Repeat:** 1. **Offered:** S. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ENSL B75ab Basic Grammar and Syntax I (4 units)

Emphasizes grammar and writing practice of the structures of basic English. **Recommended:** Placement on the Bakersfield College English as a Second Language Placement Test. **Hours:** (72) 4 lect/disc. **Repeat:** 1. **Offered:** F. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ENSL B75cd Basic Grammar and Syntax II (4 units)

Continuation of ENSL B75ab with more complex intermediate grammar and writing. Covers more advanced uses of the structures of English grammar and continues to build writing skills and vocabulary. **Prerequisite:** ENSL B75ab. **Hours:**

(72) 4 lect/disc. **Repeat:** 1. **Offered:** S. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

ENSL B200 Basic English Skills (0 units)

Basic listening, speaking, reading, and writing skills for high-beginning to low intermediate non-native speakers of English. A distance-learning program. **Hours:** (0.5-238) 0.5 - 13 programming hours. Open entry/open exit. **CCS:** Precollegiate - Basic Skills. **Not Transferable:** Not degree applicable.

FRENCH

FREN B1 Elementary French (5 units)

Introduction to French language and culture by means of a program that combines video, audio and print media into an integrated method of "planned immersion." Emphasis is on communication in the language with special attention given to listening comprehension and pronunciation. Requires practice with audiotape program outside of regular class time. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 5 lect. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN FREN 2) (FREN B1 + FREN B2 = CAN FREN SEQ A)

FREN B2 Elementary French (5 units)

Continuated study of French language and culture using the "planned immersion" approach begun in FREN B1. Listening comprehension and pronunciation continue to be emphasized, along with the development of writing skills. Requires practice with audiotape program outside of regular class time. **Prerequisite:** FREN B1 or two years of high school French. **Hours:** (90) 5 lect. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN FREN 4) (FREN B1 + FREN B2 = CAN FREN SEQ A)

FREN B3 Intermediate French (4 units)

Reading selections present modern French writers and aspects of French culture. Continues the multi-media program begun in FREN B1 and FREN B2 with increased emphasis on reading and writing. Requires practice with audiotape program outside of class. **Prerequisite:** FREN B2, three years of high school French or evaluation by instructor of student's French skills. **Hours:** (72) 4 lect. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

FREN B4 Intermediate French (4 units)

Grammar review and presentation of some of the more complex structures. Emphasis is on reading and writing along with oral communication. Requires practice with audiotape program outside of class. Completes the multi-media program for college French. **Prerequisite:** FREN B3 or four years of high school French or evaluation by instructor of student's French skills. **Hours:** (72) 4 lect. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

GERMAN

GERM B1ab Elementary German (5 units)

B1a-B1b (2.5-2.5) equivalent to B1ab.

This course caters to those with no prior knowledge of German. The course is based on the communicative approach which provides the student with elementary communication experience, vocabulary, and grammar structure based on the dialogues and the listening and reading exercises in the textbook. This course is designed to develop understanding, speaking, reading, and writing components of current German. Requires practice with audiotape program outside of class. **Prerequisite:** B1b: GERM B1a. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 5 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (GERM B1a + B1b = CAN GERM 2) (GERM B1a + B1b + B2 = CAN GERM SEQ A)

GERM B2 Elementary German (5 units)

German language and culture with continued emphasis on pronunciation, conversation, listening comprehension and writing skills. Requires practice with audio tapes outside of regular class time. **Prerequisite:** GERM B1ab or two years of high school German. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 5 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (GERM B1a + B1b + B2 = CAN GERM SEQ A)

JAPANESE

JAPN B1 Elementary Japanese (5 units)

Introduction to Japanese language and culture. Special emphasis is on speaking and understanding Japanese along with mastering elementary grammar and compositions while learning the characters of Japanese alphabets. Requires practice with audiotape program outside of class. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 5 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

JAPN B2 Elementary Japanese (5 units)

Continuing of elementary course introducing Japanese language and culture. Special emphasis on speaking and understanding Japanese along with mastering elementary grammar and composition while learning the characters of Japanese alphabets. Requires practice with audiotape program outside of class. **Recommended:** JAPN B1. **Hours:** (90) 5 lect. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

JAPN B52a Elementary Conversational Japanese (2 units)

Oral practice of the language. Emphasizes pronunciation, correct usage, and common idiomatic speech. Content designed for students who wish to acquire the basic skills of spoken Japanese. **Hours:** (54) 3 lect. **Repeat:** 1. **CCS:** Liberal Arts & Sciences. **Not Transferable:** Not degree applicable.

RUSSIAN**RUSS B1ab Elementary Russian (5 units)**

B1a-B1b (2.5-2.5) equivalent to B1ab.

Introduction to the Russian language including the Cyrillic alphabet, grammar, and culture through audio, print, and cultural realia. This course covers speaking, reading, writing, listening, and the culture of Russia. **Prerequisite:** B1b: RUSS B1a. **Recommended:** Reading Level 5 or 6. **Hours:** (54-90) B1a: (54) 3 lect; B1b: (54) 3 lect; B1ab (90) 5 lect. **Offered:** F, S. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges.

SPANISH**SPAN B1ab Elementary Spanish (5 units)**

B1a-B1b (2.5-2.5) equivalent to B1ab.

Introduction to the Spanish language and culture by means of a program that involves video, audio, and print media into an integrated method of “planned immersion.” Emphasis is on listening comprehension and oral production. **Prerequisite:** B1b: SPAN B1a. **Recommended:** Reading Level 5 or 6. **Hours:** (54-90) B1a: (54) 3 lect; B1b: (54) 3 lect; B1ab: (90) 5 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (SPAN B1a + B1b = CAN SPAN 2) (SPAN B1a + B1b + B2a + B2b = CAN SPAN SEQ A)

SPAN B2ab Elementary Spanish (5 units)

B2a-B2b (2.5-2.5) equivalent to B2ab.

Continued study of Spanish language and outline using the “planned immersion” approach begun in SPAN B1ab. Listening comprehension continues to be emphasized along with the development of oral production and writing. **Prerequisite:** SPAN B1ab or three years of high school Spanish, B2b: SPAN B2a. **Hours:** (54-90) B2a: (54) 3 lect; B2b: (54) 3 lect; B2ab (90) 5 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (SPAN B2a + B2b = CAN SPAN 4) (SPAN B1a + B1b + B2a + B2b = CAN SPAN SEQ A)

SPAN B3 Intermediate Spanish (4 units)

Reading selections of Spanish and Latin American authors including essays, short stories, plays and poetry with the

purpose of nourishing an understanding of the Spanish culture and language. Intensive grammar review of the Spanish language. **Prerequisite:** SPAN B2ab. **Hours:** (72) 4 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (SPAN B3 + SPAN B4 = CAN SPAN SEQ B)

SPAN B4 Intermediate Spanish (4 units)

Continued advanced readings from Spanish and Latin American authors, and continue intensive grammar review of the Spanish language preparing students for upper division work in literature and language. **Prerequisite:** SPAN B3. **Hours:** (72) 4 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (SPAN B3 + SPAN B4 = CAN SPAN SEQ B)

SPAN B10 Spanish for Native Speakers (4 units)

An intermediate course, equivalent to SPAN B4 in content, designed to fulfill the particular needs of bilingual students with special emphasis on the grammar of the language as well as the development of reading and writing. Special attention will be given to correct pronunciation. **Recommended:** Native speaker or equivalent. **Hours:** (72) 4 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

SPAN B52a-B52b 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:** B52b: SPAN B52a or equivalent. **Hours:** (54-54) 3 lect. **Repeat:** 1. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Not Transferable:** Not degree applicable.

SPAN B52c-B52d Intermediate Conversational Spanish (2-2 units)

Designed to present continuity in the study of conversational Spanish. Advanced practice in conversation, usage and grammar. **Prerequisite:** B52c: SPAN B52b or evaluation by instructor. B52d: SPAN B52c or evaluation by instructor. **Hours:** (54-54) 3 lect. **Repeat:** 1. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Not Transferable:** Not degree applicable.

SPAN B52e-B52f Advanced Conversational Spanish (0.5-2; - 0.5-2 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 B52d or evaluation by instructor. **Hours:** (13.5-54) 0.75-3 lect. **Repeat:** 1. **CCS:** Liberal Arts & Sciences. **Not Transferable:** Not degree applicable.

SPAN B53 Short Stories in Spanish (0.5 unit)

Reading, discussion and analysis of short stories in Spanish. Class discussion and applications. **Prerequisite:** SPAN B2ab. **Hours:** (9) 9 lect for 1 week. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Not degree applicable.

SPAN B54 Spanish for Health Professionals (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. **Hours:** (54) 3 lect. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

SPAN B55 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. **Hours:** (54) 3 lect. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

*Health and
Physical
Education*

Athletics

Health Education

Physical Education

ASSOCIATE IN ARTS

Physical Education

The major requirements for an Associate Degree in Physical Education may be satisfied by completing 22 units as outlined below.

Required Courses: 22 units

Course Number	Title	Units
HLED B1	Principles of Health Education	3.0
PHED B39a	Prevention and Care of Athletic Injuries	3.0
PHED B40	Introduction to Physical Education	3.0
PHED B41	Recreation Leadership	2.0
PHED B31	Standard First Aid	1.0
BIOL B14 or BIOL B18 or BIOL B20	Human Anatomy Essentials of Human Anatomy and Physiology Human Biology	4.0

Electives: at least 6 units

Select at least 6 units in Physical Education activity courses from a minimum of 3 different activities.

Recreation

Students majoring in recreation at Bakersfield College should consult the catalog of the four-year college to which they intend to transfer. Specific areas of concentration in the major will determine the lower-division courses required.

Course Number	Title	Units
PHED B41	Recreation Leadership	2.0
PHED B31	Standard First Aid	1.0

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

HEALTH EDUCATION

Credit limitations may apply. For specific information see a counselor or the transfer institution.

HLED B1 Principles of Health Education (3 units)

Health and health-related services. Includes emotional health, nutrition, drugs, marriage and family, physical disease, exercise and environmentally related health concerns.

Recommended: Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

HLED B5 Drug Awareness-Substance Use/Abuse (1 unit)

History of drug use in athletics, including short and long term effects. The pros and cons of drug screening and/or testing programs-its legal implications. **Hours:** (18) 2 lect for 9 weeks. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

HLED B248ab Cooperative Work Experience Education (1-8 units. Limit 16 units)

See WEXP B248ab description.

HLED B249ab Cooperative Work Experience Education (1-4 units. Limit 16 units)

See WEXP B249ab description.

PHYSICAL EDUCATION

Credit limitations may apply. For specific information see a counselor or the transfer institution.

Physical education activity courses are designed to enhance the student's understanding of the development of the individual as an integrated physiological, psychological, and social being. The courses include a study of how internal and external influences interact in human development and behavior within the context of the human life span.

PHED B3adp Through 9

Hours: (18-36) 2 hours participation unless otherwise indicated. **Repeat:** Activity courses, B3adp through B9, may be repeated 3 times. Example: B6T (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 & Sciences. **Transferable:** UC, CSU and private colleges.

PHED B3adp Adaptive Physical Education Topics (1 unit each)

This series is intended for students with physical challenges. Individualized fitness programs for the physically challenged with group activities designed to involve everyone. **Repeat:** 3. Repetitions of adaptive physical education are allowed (beyond three) provided the student participates in at least one additional credit course that is not a physical education class and makes progress toward the stated educational goal as documented in the student's educational plan. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PHED B3adp Adaptive Physical Education.**PHED B3ads Adaptive Physical Education, Swimming****PHED B3adw Adaptive Physical Education, Wheelchair Sports****PHED B5 Team Activities for Women (1 unit)**
B5wsb-Softball.**PHED B6 Coeducational Team and Individual Activities (1 unit)**

B6a-archery, B6b-bowling, B6bad-badminton, B6bb-basketball, B6bLb-beginning ballet (NOTE: Not open to students with credit in DANC B6bLb), B6fcx-fitness center, B6g-golf, B6gi-intermediate golf, B6hx-health exercises, B6jd-jazz dance (NOTE: Not open to students with credit in DANC B6jd), B6Lg-life guarding, B6md-modern dance (NOTE: Not open to students with credit in DANC B6md), B6pf-physical fitness, B6r-racquetball, B6s-swimming, B6sc-soccer, B6sfx-swim and stay fit, B6t-tennis, B6ti-intermediate tennis, B6v-volleyball, B6vi-intermediate volleyball, B6wsi-water safety, B6wt-Weight Training. **Prerequisite:** B6Lg and B6wsi: Red Cross certificate.

PHED B7 Advanced Team and Individual Activities for Men (1 unit)

B7b-advanced baseball, B7fb-advanced football, B7w-advanced wrestling. **Recommended:** Completion of a basic course in the activity.

PHED B9 Advanced Team and Individual Coeducational Activities (1 unit)

B9s-advanced swimming, B9t-advanced tennis, B9tr-advanced track. **Recommended:** Completion of a basic course in the activity.

INTERCOLLEGIATE ATHLETICS

Credit limitations may apply. For specific information see a counselor or the transfer institution.

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 maintained 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). Field trips may be required. **Repeat:** 3. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** May be substituted for physical education requirement for graduation.

PHED B10 Intercollegiate Football (2 units)**PHED B11 Intercollegiate Basketball (Fall-2 units; Spring-1 unit)****PHED B12 Intercollegiate Track and Field (2 units)****PHED B13 Intercollegiate Tennis (2 units)****PHED B14 Intercollegiate Baseball (2 units)****PHED B16 Intercollegiate Golf (2 units)****PHED B17 Intercollegiate Cross-Country (2 units)****PHED B20 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). Field trips may be required. **Repeat:** 3. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** May be substituted for physical education requirements for graduation.

PHED B22 Women's Intercollegiate Tennis (2 units)**PHED B23 Women's Intercollegiate Soccer (2 units)****PHED B25 Women's Intercollegiate Volleyball (2 units)****PHED B26 Women's Intercollegiate Track and Field (2 units)****PHED B27 Women's Intercollegiate Cross-Country (2 units)****PHED B28 Women's Intercollegiate Basketball (Fall-2 units; Spring-1 unit) Repeat: 3.****PHED B29 Women's Intercollegiate Softball (2 units)****PHED B30 Dance and Cheer Techniques (1-2 units)**

Instruction, training and practical experience in the techniques for the development of pep routines. Activities include choreography and composition of routines and dance preparations for various college and community service performances. Attendance at athletic games and rallies is required. **Hours:** (90-180) 5-10 by arrangement. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges. **Note:** Elective credit only.

PHED B31 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, each student will qualify for an American Red Cross Standard First Aid card and an American Heart Association Heartsaver Participation card. **Hours:** (18) 2 lect/disc for 9 weeks. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PHED B32 Shape Up (1-3 units)

An integration of physiological, psychological and sociological understandings of the human being in relationship to physical activity as a lifelong pursuit. Topics include physical fitness, nutrition, stress reduction, socialization, and individual differences in human behavior. **Hours:** (36-108) 1 lect, 5 lab participation. **Offered:** F, S, SS. **Repeat:** 3 or until a maximum of 12 units is reached. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PHED B33 Men's and Women's Intercollegiate Swimming (2 units)

Intercollegiate Coeducational Competition **Prerequisite:** Must meet athletic code eligibility requirements. **Hours:** (180) 10 hours by arrangement (usually 2 hours per day). Field trips may be required. **Repeat:** 3. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PHED B38 Sport Emergencies and Safety Training (1 unit)

Designed to prepare coaches and people involved in sports for dealing with sports related emergencies, early first aid injury care and safety. Certification through American Red Cross in Sport Safety Training (optional). **Hours:** (36) 1.5 lect, 4.5 lab for 6 weeks. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. Note: Elective credit only.

PHED B39a Prevention and Care of Athletic Injuries (3 units)

An introduction to the field of sports medicine. Evaluation, rehabilitation and prevention of athletic injuries. Various physical therapy modalities will be discussed. The athletic trainer will properly advise students who take this course of limitations and proper skills applications. **Hours:** (90) 2 lect, 3 lab. Field trip required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PHED B39b Evaluation, Rehabilitation and Modalities of Athletic Injuries (3 units)

Evaluation and rehabilitation of athletic injuries; exposure to various physical therapy modalities and prevention of injuries will be discussed. The athletic trainer will properly advise students who take this course of limitations and proper skills applications. **Recommended:** BIOL B14 or B18 or B20 or evaluation by instructor of student's knowledge of musculoskeletal anatomy. **Hours:** (90) 2 lect, 3 lab. Field trip required. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. Note: Elective credit only.

PHED B40 Introduction to Physical Education (3 units)

Exploring employment opportunities in the field of physical education, history and teaching of physical education and the contribution made to the mental, social and physical well-being of society. Recommended for students pursuing a major or minor in Physical Education or Recreation. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PHED B41 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. Recommended for students pursuing a major or minor in Physical Education or Recreation. **Hours:** (36) 2 lect/disc. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

PHED B43 Title 22 Certification (1 unit)

Course covers CPR, first aid, basic life support and childbirth for the professional rescuer. Upon successful completion, Red Cross Title 22 certification will be given. **Hours:** (18) 2 lect for 9 weeks. **Offered:** S. **Repeat:** 3. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

PHED B45 Theory of Football (3 units)

Designed to give students an understanding of the principles of offensive and defensive football. Also covers practice planning, drills, game preparation and coaching. **Recommended:** Concurrent enrollment in PHED B10. **Hours:** (90) 5 lect. **Offered:** F. **Repeat:** 3. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PHED B47 Theory of Baseball (2 units)

Designed to provide students the opportunity to master coaching techniques, coaching philosophy, practice organization, and strategies involved in the game of baseball. **Hours:** (36) 2 lect. **Repeat:** 3. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges. Note: Elective credit only.

PHED B52 Cardiopulmonary Resuscitation (0.5 unit)

Initial or retraining course in C.P.R. Upon completion the student will qualify for an American Heart Association Heartsaver Participation Card. **Hours:** (9) 4.5 lect/disc for 2 weeks. **Offered:** F, S. **Repeat:** 3. **CCS:** Liberal Arts & Sciences. **Not Transferable:** Associate Degree only.

PHED B55 Introduction to Coaching (2 units)

Provides state certification for part-time coaches for recreation programs and grades K through 12. Covers C.P.R. certification, sports medicine and first aid. Sports physiology, sports psychology, coaching theory and responsibilities, and practice organizations. **Hours:** (36) 3 lect, 1 lab for 9 weeks. **CCS:** Liberal Arts & Sciences. **Not Transferable:** Not degree applicable.

*Independent
and
Special
Studies*

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

Credit limitations may apply. For specific information see a counselor or the transfer institution.

ANTH B21abcd Special Projects (1-1-1-1 unit. Limit 4 units)

Anthropology assistant and tutor. Work primarily in a tutorial relationship with students enrolled in a course which the enrollee has completed with a high level of mastery. **Prerequisites:** ANTH B1 with a grade of "B" and completion of the course in which the 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 & Sciences. **Transferable:** UC, CSU and selected institutions.

ART B29 Special Studies in Art (0.5-3 units. Limit 9 units)

Selected advanced projects. Class content and unit credit to be determined by instructor and student. **Recommended:** Completion of beginning courses in a particular series or evaluation by instructor of student's skills in subject area. **Hours:** (27-162) .5 lect, 1 studio to 3 lect, 6 studio. **Repeat:** 3, or until a maximum of 9 units is reached. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. Note: Elective credit only.

BIOL B21 Special Projects in Biology (1-2 units. Limit 4 units)

Individually directed work in biology, biological preparation, and development of specialized collection materials. **Prerequisites:** Introductory course in college biology and evaluation by instructor. **Recommended:** Reading Level 5 or 6. **Hours:** (54-108) 3 directed study/unit. **Repeat:** 3 or until a limit of 4 units is reached. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

COMS B201 Computer Skills Development (1 unit)

Computer Skills development through application to specific discipline areas. **Hours:** (Independent Study) Hours by arrangement. **Repeat:** 3. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FDSV B56 Special Project in Foods and Nutrition (1 unit. Limit 2 units)

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. **Prerequisite:** Completion of the first-year curriculum of the foods and nutrition program with a grade of "B." **Recommended:** Reading Level 5 or 6 and recommendation by faculty member. **Hours:** (18) 1 seminar. **Repeat:** 1, not to exceed 2 units. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

INDT B271 Special Problems in Welding (2-3 units. Limit 6 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. **Prerequisite:** WELD B1a or WELD B53a with a grade of "C." or equivalent experience evaluated by instructor. Completed "Petition for Individual Study" form. **Recommended:** Reading Level 5 or 6. Enrollment is contingent on available lab space. **Hours:** (36-54) Hrs. by arrangement. **Repeat:** 1 or until a maximum of 6 units is reached. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

INDT B272 Special Problems in Electronics (2-3 units. Limit 6 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:** Completion of minimum of 9 units of electronics courses with a grade of "C" or equivalent experience or evaluation by instructor of electronics experience. Completed "Petition for Individual Study" form. Enrollment is contingent on available lab space. **Hours:** (36-54) Hrs. by arrangement. **Repeat:** 1 or until a limit of 6 units is reached. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

INDT B273 Special Problems in Machine Tool Metal Working (2-3 units. Limit 6 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:** Completion of minimum of 6 units of machine tool courses with a grade of "C" or equivalent experience or evaluation by instructor of machine

working. Completed "Petition for Individual Study" form. **Hours:** (36-54) Hrs. by arrangement. **Repeat:** 1 or until a limit of 6 units is reached. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

INDT B274 Special Problems in Wood Working (2-3 units. Limit 6 units)

Provides 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:** Completion of minimum of 9 units of woodworking courses with a grade of "C" or equivalent experience evaluation by instructor. Completed "Petition for Individual Study" form. **Recommended:** Reading Level 5 or 6. Enrollment is contingent on available lab space. **Hours:** (18-54) Hrs. by arrangement. **Repeat:** 1 or until a limit of 6 units is reached. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

INDT B275 Special Problems in Automotive (2-3 units. Limit 6 units)

Provides the individual students the opportunity to explore various segments of automotive. 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:** Completion of minimum of 9 units of automotive courses with a grade of "C" or evaluation by instructor of automotive experience. Completed "Petition for Individual Study" form. Enrollment is contingent on available lab space. **Hours:** (36-54) Hrs. by arrangement. **Repeat:** 1 or until a limit of 6 units is reached. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

INDT B276 Special Problems in Animation (2-3 units. Limit 6 units)

Provides individual students the opportunity to explore processed video animation and production. Development and implementation of meaningful, self-directed studies in areas where students desire specific technical and related skills development necessary for enrichment or employment. **Prerequisite:** INDR B16 with a grade of "C" or higher or equivalent experience evaluated by instructor. Completed "Petition for Individual Study" form. **Recommended:** Reading Level 5 or 6. Enrollment is contingent on available lab space. **Hours:** (36-54) Hrs by arrangement. **Repeat:** 1 or until a maximum of 6 units is reached. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

MATH B21 Special Projects in Mathematics (1-2 units. Limit 4 units)

Individually directed work in mathematics, including advanced topics, research projects, special problems and applications of mathematics to specific subject areas. **Prerequisites:** Completion of a basic course in mathematics with a grade of "B" and evaluation by instructor. **Recommended:**

Reading Level 5 or 6. **Hours:** (18-36) 1 lab. **Repeat:** 3. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PHSC B21 Special Projects in Physical Science (0.5-3 units. Limit 3 units)

Individually directed work in a science, engineering or architecture area. Individual research problems using materials, equipment and techniques not available in larger classes. **Prerequisites:** Completion of a basic course in science, engineering, or drafting with a minimum grade of "C" and evaluation by instructor. **Recommended:** Reading Level 5 or 6. **Hours:** (27-162) 3 directed study/unit. **Repeat:** 2, or until a limit of 3 units is reached. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PSYC B21a-B21b-B21c-B21d Special Projects (1-1-1-1 unit. Limit 4 units)

Psychological assistant and tutor. Work primarily in a tutorial relationship with students enrolled in a course which the enrollee has completed with a high level of mastery. **Prerequisites:** PSYC B1a with a grade of "B" and completion of the course in which 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 & Sciences. **Transferable:** UC, CSU and selected institutions.

SOCI B21abcd Special Projects (1-1-1-1 unit. Limit 4 units)

Sociology assistant and tutor. Work primarily in a tutorial relationship with students enrolled in a course which the enrollee has completed with a high level of mastery. **Prerequisites:** SOCI B1 with a grade of "B" and completion of the course in which 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 & Sciences. **Transferable:** UC, CSU and selected institutions.

SPST B48 Special Studies: Honors (0.5-2 units. Limit 4 units)

Study and projects 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 study and projects in a subject area. The course will be designated according to the subject fields studies, i.e. Special Studies/German. **Prerequisite:** Approval by instructor. **Hours:** (9-18-27-36) .5-1 - 1.5-2 lect/disc. Field trips may be required. **Repeat:** 1 or until a limit of 4 units is reached. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges.

SPST B49 Special Studies: Honors (.5-2 units. Limit 4 units)

Seminars and /or individual conferences by arrangement. Independent, individual study planned to provide an enriched academic experience for students not being served in regu-

larly scheduled courses. Meets 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 studies, i.e. Special Studies/German. **Prerequisite:** Approval by the instructor. **Hours:** (24-96). Field trips may be required. **Repeat:** 1 or until a limit of 4 units is reached. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

**SPST B49L Special Studies Lab: Honors
(1-2 units. Limit 4 units)**

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 of studies, i.e. Special Studies/German. **Prerequisite:** Recommendation by instructor. **Hours:** (54-108) 3-6 lab by arrangement. Field trips may be required. **Repeat:** 1 or until a limit of 4 units is reached. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

**SPST B201 Special Projects and Studies
(1-3 units. 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 instructor. **Hours:** (18-54) 1-3 hours by arrangement. Field trips may be required. **Repeat:** 3, or until 6 units are reached. **CCS:** Liberal Arts & Sciences. **Not Transferable:** Not degree applicable.

**SPST B201L Special Projects and Studies
(1-3 units. 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 instructor. **Hours:** (54-162) 3-9 hours by arrangement. Field trips may be required. **Repeat:** 3, or until 6 units are reached. **CCS:** Liberal Arts & Sciences. **Not Transferable:** Not degree applicable.

**SPST B210 Independent Reading Program
(1-2 units. Limit 2 units)**

Independent reading of books in the social sciences, physical sciences and humanities under Library staff supervision. **Recommended:** Reading Level 5 or 6. **Hours:** (54-108) 3-6 lab by arrangement. **Repeat:** 1. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

Mathematics

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ASSOCIATE IN ARTS DEGREE

Required Courses: 18 units

Course Number	Title	Units
MATH B6a	Analytic Geometry and Calculus I	4.0
MATH B6b	Analytic Geometry and Calculus II	4.0
MATH B6c	Calculus III	4.0
MATH B6d	Ordinary Differential Equations	3.0
MATH B6e	Elementary Linear Algebra	3.0

Recommended Courses

Course Number	Title	Units
PHIL B7	Introduction to Logic	3.0
PHYS B4a	Mechanics and Wave Motion	4.0
COMS B11	Introduction to Programming with PASCAL	3.0
ENGR B19c	Computer Programming for Science, Engineering and Technology (C programming Language)	3.0
MATH B21	Special Projects in Mathematics (MAPLE <i>on-line</i>)	1.0
MATH B22	Elementary Probability and Statistics	5.0

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

MATHEMATICS

Credit limitations may apply. For specific information see a counselor or the transfer institution.

MATH BA 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. **Prerequisites:** MATH B50 or equivalent pre-algebra course or qualifying score on entrance examination. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 5 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Not Transferable:** Associate Degree only.

MATH BB 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 BA or MATH B200a or one year of high school algebra or equivalent with a grade of "C." **Recommended:** Reading Level 5 or 6. **Hours:** (90) 5 lect. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Not Transferable:** Associate Degree only.

MATH BC 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 MATH BD or MATH B200d or two years of high school algebra or equivalent with a grade of "C." **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

MATH BD Intermediate Algebra (4 units)

Sets and 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:** MATH BA or MATH B200a or one year of high school algebra or equivalent with a grade of "C." **Recommended:** Reading Level 5 or 6. **Hours:** (90) 5 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Not Transferable:** Associate Degree only.

MATH B1 Mathematical Analysis (4 units)

Polynomial, rational, exponential, logarithmic, trigonometric and circular functions, elementary theory of equations, graphing techniques, selected topics from analytic geometry, mathematical inductions, sequences and series, geometric and algebraic vectors, symbolic logic, matrix operations and methods of proof. **Prerequisite:** MATH BC or equivalent with a grade of "C." **Hours:** (90) 5 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MATH B2 Basic Functions and Calculus for Business (5 units)

Modern concepts in mathematics emphasizing applications to business. Functions and the basic concepts of differential calculus with introductions to integral calculus and multivariable calculus. **Prerequisite:** MATH BD or MATH B200d or two years of high school algebra or equivalent with a grade of "C." **Hours:** (90) 5 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MATH B6a Analytic Geometry and Calculus I (4 units)

Elements of analytic geometry, differential calculus and introduction to integration of algebraic functions. **Prerequisite:** MATH B1 or equivalent with a grade of “C.” **Hours:** (72) 4 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN MATH 18) (MATH B6a + MATH B6b = CAN MATH SEQ B) (MATH B6a + MATH B6b + MATH B6c = CAN MATH SEQ C)

MATH B6b 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 B6a or equivalent with a grade of “C.” **Recommended:** Reading Level 5 or 6. **Hours:** (72) 4 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN MATH 20) (MATH B6a + MATH B6b = CAN MATH SEQ B) (MATH B6a + MATH B6b + MATH B6c = CAN MATH SEQ C)

MATH B6c 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 B6b or equivalent with a grade of “C.” **Hours:** (72) 4 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN MATH 22) (MATH B6a + MATH B6b + MATH B6c = CAN MATH SEQ C)

MATH B6d 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 B6c or equivalent with a grade of “C.” **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN MATH 24)

MATH B6e 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 B6c or equivalent with a grade of “C.” **Hours:** (54) 3 lect. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN MATH 26)

MATH B16 Liberal Arts Mathematics (4 units)

Major mathematical concepts in the areas of management, science, statistics, social choice, the geometry of size and shape, and mathematics for computer science. Emphasis is on real-world applications. Students will learn to think logically and read technical information critically. Historical vignettes. For liberal arts students. **Prerequisite:** MATH BD or equivalent

with a grade of “C.” **Recommended:** Reading Level 5 or 6. **Hours:** (90) 5 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. (CAN MATH 2)

MATH B22 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 BD or MATH B200d or equivalent with a grade of “C.” **Recommended:** Reading Level 5 or 6. **Hours:** (90) 5 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN STAT 2)

MATH B23 Finite Mathematics (3 units)

Includes sets and Venn diagrams, solving equations and inequalities in one variable, relations and functions, matrices, linear inequalities in two variables, linear programming, mathematics of finance including simple and compound interest, annuities, and probability. **Prerequisite:** Math BD with a grade of “C” or better. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges.

MATH B50 Modern College Arithmetic and Pre-Algebra (3 units)

A general review of basic arithmetic including the fundamental operations of addition, subtraction, multiplication and division of whole numbers, fractions and decimals. Emphasis is placed on real life applications, including percents, ratios, proportions, exponents, averages, estimation, graphs and measurement. The introduction to algebra includes operations with signed numbers and solving simple equations. **Recommended:** Qualifying score on placement assessment and/or evaluation by counselor. Reading Level 4. **Hours:** (72) 4 lect. **Offered:** F, S, SS. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable. **Note:** Not open to students who have taken MATH B251 and B252.

MATH B200a Elementary Algebra (3 units)

Self-paced, open entry/open exit. For description, see MATH BA.

MATH 200d Intermediate Algebra (4 units)

Self-paced, open entry/open exit. For description, see MATH BD.

MATH B251 Modern College Arithmetic (2 units)

A general review of arithmetic, including the fundamental operations of addition, subtraction, multiplication and division of whole numbers, fractions, decimals, ratio, proportions and percents. **Hours:** (64) 4 lab for 16 weeks. Open entry/open exit. **Offered:** F, S, SS. **CCS:** Precollegiate - basic

skills. **Not Transferable:** Not degree applicable. **Note:** MATH B251 and B252 are equivalent to MATH B50. Not open to students who have taken MATH B50.

MATH B252 Sign Numbers and Equations (1 unit)

A general review of signed numbers, exponents and simple algebraic equations. **Hours:** (24) 4 lab for 6 weeks. Open entry/open exit. **Offered:** F, S, SS. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable. **Note:** MATH B251 and B252 are equivalent to MATH B50. Not open to students who have taken MATH B50.

MATH B255 Math Problem Solving Lab (0.5 unit)

Designed for Math students desiring additional assistance in specific problem solving areas. Students will work on problems from math courses in which they are concurrently enrolled. **Hours:** (9) 9 hours arranged. Open entry/open exit. Repeat: 3. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Not degree applicable.

Music

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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.

ASSOCIATE IN ARTS DEGREE

Required Courses: 24 units

Course Number	Title	Units
MUSC B4ab	Elementary Theory	6.0
MUSC B4c	Intermediate Theory-Tonal Counterpoint	3.0
MUSC B4d	Intermediate Theory-Contemporary Materials	3.0
MUSC B5ab	Class Piano	2.0
MUSC B15ab	Ear Training	2.0
MUSC B21ab	History of Music	6.0

Group Performance (Select one each semester)

Course Number	Title	Units
MUSC B10ad	Concert Band	8.0
MUSC B12ad	College Orchestra	8.0
MUSC B13ad	Jazz Ensemble	4.0
MUSC B14ad	College Choir	8.0

Other Suggested Courses

Course Number	Title	Units
MUSC B2	Basic Elements of Music	3.0
MUSC B5cd	Class Piano	2.0
MUSC B6ab	Class Voice	2.0
MUSC B6cd	Class Voice	2.0
MUSC B9ac	Class Guitar	3.0
MUSC B16	Beginning Ear Training	1.0
MUSC B17ad	Chamber Singers	8.0
MUSC B20ma	Mariachi Ensemble	1.0
MUSC B20sd	Steel Drum Band	1.0
MUSC B22	Music Appreciation	3.0
MUSC B23	Appreciation of Jazz	3.0
MUSC B24	A Survey of World Music	3.0
MUSC B27	History of American Popular Music	3.0
MUSC B54ad	College Chorale	4.0
MUSC B60ab	Concepts and Applications of Music Technology	6.0
MUSC B230ab	Music Laboratory	2.0

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are

hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. See page 40 for a complete explanation. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

MUSIC

Credit limitations may apply. For specific information see a counselor or the transfer institution.

MUSC B2 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:** Concurrent enrollment in MUSC B16. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 3 lect, 2 lab. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B4a-B4b Elementary Theory (3-3 units)

A study of common practice harmony. From the construction of scales, modes, and triads to four-part voice-leading and simple modulations. **Prerequisite:** MUSC B2 or evaluation by instructor of theory fundamentals. 4a: Concurrent enrollment in MUSC B15a; 4b: Concurrent enrollment in MUSC B15b. **Recommended:** Reading Level 5 or 6. **Hours:** (90-90) 3 lect, 2 lab. **Offered:** B4a F; B4b S. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B4c Intermediate Theory-Tonal Counterpoint (3 units)

A study of tonal counterpoint. From an introduction to species counterpoint to composing a 3-voice fugue in 18th century style. **Prerequisite:** MUSC B4b. **Hours:** (54) 3 lect. **Offered:** F. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B4d Intermediate Theory-Contemporary Materials (3 units)

A study of compositional styles and practices since the late 19th century including practical application in composition. Covers advanced chromaticism, impressionism, serialism, pandiatonism, and jazz harmony. **Prerequisite:** MUSC B4b. **Hours:** (54) 3 lect. **Offered:** S. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B5a-B5b-B5c-B5d 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. **Recommended:** B5a: Reading Level 5 or 6, English Level 6, B5bcd in sequence or evaluation by instruc-

tor **Hours:** (36 each) 2 lab. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B6a-B6b-B6c-B6d Class Voice (1-1-1-1 unit)

Elementary solo vocal training. Emphasizes breath control, tone placement, posture, diction and interpretive concepts. B6b-B6c-B6d emphasizes repertoire and further technical development. **Recommended:** 6a: Basic understanding of music fundamentals. **Hours:** (36 each) 2 lab. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B9a 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. A suitable acoustic guitar required. **Recommended:** Reading Level 5 or 6 or evaluation by instructor. **Hours:** (36) 2 lab. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B9b Intermediate Class Guitar (1 unit)

Intermediate techniques of guitar playing. Emphasizes advanced chord positions, scales, arpeggios, slurs, and bar chords. A suitable acoustic guitar required. **Prerequisite:** MUSC B9a. **Recommended:** Reading Level 5 or 6 or evaluation by instructor. **Hours:** (36) 2 lab. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B9c Advanced Class Guitar (1 unit)

Advanced techniques of guitar playing. Emphasizes advanced chord positions, scales, arpeggios, slurs, and bar chords. A suitable acoustic guitar required. **Prerequisite:** MUSC B9b or equivalent. **Recommended:** Reading Level 5 or 6. **Hours:** (36) 2 lab. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B10a-B10b-B10c-B10d Concert Band (2-2-2-2 units)

Rehearsal and performance of standard band literature. Participation in public performances such as concerts, assemblies, and additional rehearsals are required. **Prerequisite:** Audition. **Hours:** (54) 1 lect, 2 lab. Field trips required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B12a-B12b-B12c-B12d College Orchestra (2-2-2-2 unit)

Performance of standard works from the orchestra literature. **Prerequisites:** Audition. **Hours:** (54 each) 3 lab. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B13a-B13b-B13c-B13d Jazz Ensemble (1-1-1-1 unit)

Practical experience in organizing instrumental combinations. Training in standard dance band phrasing and improvisation with performances at various functions. **Prerequisite:** Evaluation by instructor. **Recommended:** Reading Level 5 or 6. **Hours:** (54 each) 3 lab. Field trips required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B14a-B14b-B14c-B14d College Choir (2-2-2-2 units)

Study of major choral literature of all the historical periods. Public performance required for credit. **Prerequisites:** Previous experience in a choral group and demonstrated proficiency, evaluation by instructor. **Hours:** (90) 3 lect/2 by arrangement. Field trips for performances are required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B15a-B15b Ear Training and Sight Singing (1-1 unit)

Basic drill in the singing and recognition of intervals, scales, and diatonic melodies with solfege syllables. Practice in rhythmic, harmonic, and melodic dictation. Extension of melodic sight singing and dictation to include chromatic passing tones and more complex rhythms. Singing and recognition of the basic varieties of triads and seventh chords. Harmonic dictation; recognition of basic chord patterns and cadences. **Prerequisites:** B15a: Concurrent enrollment in MUSC B4a. B15b: Concurrent enrollment in MUSC B4b. **Recommended:** Reading Level 5 or 6. **Hours:** (72-72) 4 lab. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B16 Beginning Ear Training (1 unit)

Develops aural proficiency and facility in dictation, chord and interval recognition, and rhythm. **Prerequisites:** Concurrent enrollment in MUSC B2 and evaluation by instructor. **Hours:** (36) 2 lab. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B17a-B17b-B17c-B17d 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. **Prerequisites:** Previous experience in a choral group and demonstrated proficiency, evaluation by instructor. **Hours:** (72) 3 lect/1 lab by arrangement. Field trips required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B20ma Mariachi Ensemble (1 unit)

Practical experience in Mariachi Ensemble. **Hours:** (54) 3 lab. Field trips may be required. **Repeat:** 3. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Elective credit only.

MUSC B20sd Steel Drum Band (1 unit)

Intermediate and advanced instruction in steel drum. Performance experience on steel drum. **Prerequisite:** Evaluation by instructor. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lab. Field trips for performance are required. **Repeat:** 3. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B21a-B21b History of Music (3-3 units)

Historical survey of western music from the Greco-early Christian era to the present. Uses recorded music and musical scores to study changing musical styles and standards of beauty. For liberal arts and music majors. **Prerequisite:** Evaluation by instructor. **Recommended:** Reading Level 5 or 6. **Hours:** (54-54) 3 lect. **Offered:** B21a F; B21b S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B22 Music Appreciation (3 units)

Introduction to appreciation of western art music. The development of classical music is surveyed with recordings, videos, multi-media computer presentations, and live performances providing illustrations for directed listening as a basis of appreciation. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Fields trips may be required. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B23 Appreciation of Jazz (3 units)

History and appreciation of jazz. Lectures, private listening, and concert attendance are required. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B24 A Survey of World Music (3 units)

An introductory course surveying the dominant musical cultures of the new non-western world with comparisons to western music. Emphasizes listening to and participation in world music through lecture, films, recording, live presentations, and class performance. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B27 History of American Popular Music (3 units)

Introduction to the historical and stylistic developments of rock music, with emphasis on its social, economic and political consequences. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B29a-B29b-B29c-B29d Varsity Pep Band (1-1-1-1 unit)

Home game pageantry and other special events. Emphasizes show style, performance of popular music and band esprit. **Prerequisite:** Audition for skill on a band instrument. **Hours:** (54 each) 3 lab. Field trips required. **Offered:** F. **CCS:**

Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

MUSC B54a-B54b-B54c-B54d College Chorale (1-1-1-1 unit)

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. **Prerequisites:** Previous experience in a choral group and demonstrated proficiency and evaluation by instructor. **Recommended:** Reading Level 5 or 6. **Hours:** (54 each) 3 lab. Field trips for performance are required. **CCS:** Liberal Arts & Sciences. **Not Transferable:** Not degree applicable.

MUSC B60a-B60b Concepts and Applications of Music Technology (3-3 units)

A hands-on study of technology as it relates to music. Includes discussion of MIDI computer applications, notation, sequencing, synthesis, digital and analog recording and mixing. **Prerequisite:** B60a: MUSC B2 or evaluation of basic music skills by instructor; concurrent enrollment in MUSC B230a or b. B60b: MUSC B60a and concurrent enrollment in MUSC B230a or b. **Hours:** (54-54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate degree only.

MUSC B230a-B230b-B230c Music Laboratory (0.5-1 unit. Limit 4 units)

Self-pacing programmed system instruction in reading, deciphering, and performing the many rhythmic combinations in music. **Hours:** (18-36 each) 18 lab per one-half unit. **Repeat:** 3, or until 4 units is reached. **CCS:** Liberal Arts & Sciences. **Not Transferable:** Not degree applicable.

Philosophy

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PROGRAMS (UNIVERSITY OR STATE COLLEGES)

A major in philosophy has always been and continues to be one of the strongest traditional liberal arts majors in higher education. Some students major in Philosophy as a precursor to graduate work and academic careers, teaching and doing research in Philosophy and Education. Philosophy's emphasis on critical 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).

ASSOCIATE IN ARTS DEGREE PROGRAM PHILOSOPHY

Required Courses: 18 units

Course Number	Title	Units
PHIL B6a	Introduction to Philosophy	3.0
PHIL B7	Introduction to Logic	3.0
PHIL B10	Introduction to Ethics	3.0
PHIL B12	Ethics of Living and Dying	3.0
PHIL B14	Business and Social Responsibility	3.0
PHIL B37	Introduction to World's Religions	3.0

Electives

Course Number	Title	Units
PHIL B6b	Introduction to Philosophy	3.0
PHIL B9	Critical Thinking and Composition	3.0
PHIL B32	World Religions: East	3.0
PHIL B33	World Religions: West	3.0

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. See page 40 for a complete explanation. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

PHILOSOPHY

Credit limitations may apply. For specific information see a counselor or the transfer institution.

PHIL B6a-B6b Introduction to Philosophy (3-3 units)

A method, problems, and historical approach to philosophy. Epistemology (the study of knowledge), metaphysics (the study of reality), ethics (the study of morality), and philosophy of religion are covered. **Recommended:** B6a: Reading Level 5 or 6, English Level 6. B6b: PHIL B6a or PHIL B10. **Hours:** (54) 3 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (PHILB6a or PHIL B6b = CAN PHIL 2)

PHIL B7 Introduction to Logic (3 units)

Traditional basics of correct reasoning with an emphasis on their relationships to language, thought and argument. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PHIL B9 Critical Thinking and Composition (3 units)

Development of critical thinking skills necessary for evaluating and formulating argumentative/persuasive essays, and practice in applying those skills. **Prerequisite:** ENGL B1a. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PHIL B10 Introduction to Ethics (3 units)

Examination of the philosophical approach to morality. Study of the meaning of ethics and morality and methods used in ethical theorizing and reasoning. Emphasizes major ethical issues and theories. Instructs how to set up an ethical system. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN PHIL 4)

PHIL B12 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 relationships among human beings through a study of what morality is, consequentialist and nonconsequentialist theories of morality, and how to set up an ethical system. Special emphasis will be placed on the relationship of the professional and the well to the sick, dying, and bereaved. **Recommended:** Reading Level 5 or 6, English Level 6. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PHIL B14 Business and Social Responsibility (3 units)

Moral and social responsibilities of business organizations to their various constituencies emphasizing customers, employees and stockholders. Topics include the nature of capitalism, corporations, basic issues in personnel management, the challenge of reindustrialization, employee responsibilities to organizations, consumer rights, job discrimination and the environment. **Recommended:** Reading Level 5 or 6, English Level 6 or evaluation by instructor. **Hours:** (54) 3 lect.

Offered: F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PHIL B32 World Religions: East (3 units)

Survey of two main Eastern religions—Hinduism and Buddhism, and study of other important Oriental religions such as Jainism, Sikhism, Lamaism, Confucianism, Taoism, and Shinto. Topics include each religion's history, sacred scriptures, geographic dispersion, primary theological concepts and spiritual practices, and its role in contemporary society. Emphasis will be placed on understanding the distinct belief and practice of an individual in each of these religious traditions. **Recommended:** Reading Level 5 or 6, English Level 6. **Hours:** (54) 3 lect. Field trips required. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PHIL B33 World Religions: West (3 units)

Survey of three western religions—Judaism, Christianity, and Islam—and background religions to these, including Egyptian, Persian, and European. Topics include each religion's history, sacred scriptures, geographic dispersion, primary theological concepts and spiritual practices, and its role in contemporary society. Emphasis will be placed on understanding the distinct belief and practices of an individual in each of these religious traditions. **Recommended:** Reading Level 5 or 6, English Level 6. **Hours:** (54) 3 lect. Field trips required. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PHIL B37 Introduction to the World's Religions (3 units)

A survey of three Western religions _ Judaism, Christianity, and Islam, and two Eastern Religions - Hinduism and Buddhism. Examines each religion's history, sacred scriptures, geographic dispersion, primary theological concepts and spiritual practices, and contemporary role. Emphasis on understanding the distinct belief and practice of an individual in each of these religious traditions. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges.

PHIL B255 Supplemental Philosophical Thinking and Writing Lab (0.5 unit)

Designed for Philosophy students desiring additional assistance in specific areas. Students will work on assignments from Philosophy courses in which they are concurrently enrolled. **Prerequisite:** Concurrent enrollment in PHIL B6a or B7. **Hours:** (9) Hours by arrangement. Individualized

instruction and supervised lab. Open entry/open exit. **Repeat:** 3. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Not degree applicable.

PHIL B261 Philosophical Thinking and Writing Supervised Tutorial Lab (0 units)

Provides supervised lab time during which students may obtain individualized instruction in such areas as philosophical thinking, perspective and organizational strategies, critical analysis and writing methodologies. **Prerequisite:** Concurrent enrollment in PHIL B6a or PHIL B7. **Hours:** (2-90) 2-5 individualized instruction and supervised lab. Open entry/open exit. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Not degree applicable.



Public Administration

Administration of Justice
Correctional Administration
Fire Technology

Programs in the Public Administration Department are designed to provide education and training in public safety and service, law enforcement and criminal justice, fire protection 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 or more years have passed since the previous enrollment.

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 federal, 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.

CERTIFICATES OF COMPLETION

Hazardous Materials

Required Courses: 8.5 units

Course Number	Title	Units
FIRE B70a	Hazardous Material for First Responders (In-service Training)	1.0
FIRE B70b	First Responder "Operational" Decontamination	0.5
FIRE B70c	Hazardous Materials Incident Commander/Scene Manager	1.0
FIRE B70d	Hazardous Materials Tech/Spec 1A: Basic Chemistry	1.0
FIRE B70e	Hazardous Materials Tech/Spec 1B: Applied Chemistry	1.0
FIRE B70f	Hazardous Materials Tech/Spec 1C: Incident Considerations	1.0
FIRE B70g	Hazardous Materials Tech/Spec 1D: Tactical Field Operations	1.0
FIRE B70h	Hazardous Materials Tech/Spec 1E: Special Mitigation Techniques	1.0
FIRE B70i	Hazardous Materials Tech/Spec 1F: Advanced Field Operations	1.0

Wildland Fire Control

Required Courses: 4 units

Course Number	Title	Units
FIRE B71a	Seasonal Firefighter Basic Training 1	2.0
FIRE B71b	Seasonal Firefighter Basic Training 2	1.5
FIRE B71e	Wildland Fire Behavior and Control	0.5

Rescue And Life Safety

Required Courses: 10.5 units

Course Number	Title	Units
FIRE B72a	Heavy Duty Rescue 1	0.5
FIRE B72b	Heavy Duty Rescue 2	0.5
FIRE B72c	Heavy Duty Rescue 3	1.0
FIRE B72d	Swift Water Rescue	1.0
FIRE B72e	Advanced Swift Water Rescue	1.0
FIRE B72f	Auto Extrication	0.5
FIRE B72g	Aircraft Fire Protection and Rescue Procedures	1.0
FIRE B72h	Emergency Medical Technician 1 Non-Ambulance	4.0
FIRE B72i	Emergency Medical Technician 1 Non-Ambulance Recertification	1.0

Specialized Training Programs

Required Courses: 7- 14 units

Course Number	Title	Units
FIRE B74	Petroleum Fire Procedures	0.5
FIRE B75	Fire Fighting Techniques	0.5
FIRE B76	Fire Fighting Skills	3.0
FIRE B77	Advanced Structure Fire Training	0.5
FIRE B78	Advanced Officer Training	0.5
FIRE B79	Instructor Orientation	0.5
FIRE B81	Orientation to Fire Technology	0.5
FIRE B83	Topics in Incident Command System Part I	0.5-4.0
FIRE B84	Topics in Incident Command System Part II	0.5-4.0

Fire Officer Certification (Nfpa Standard 1021)

Required Courses: 20 units

Course Number	Title	Units
FIRE B51a	Fire Management 1a	2.0
FIRE B51b	Fire Command 1a	2.0
FIRE B51c	Fire Command 1b	2.0
FIRE B51d	Fire Prevention 1a	2.0
FIRE B51e	Fire Prevention 1b	2.0
FIRE B51f	Fire Investigation 1a	2.0
FIRE B51g	Fire Instructor 1a	2.0
FIRE B51h	Fire Instructor 1b	2.0
FIRE B51i	Fire Prevention 1c	2.0
FIRE B51j	Fire Investigation 1b	2.0

Fire Inspector Certification

Required Courses: 6 units

Course Number	Title	Units
FIRE B51d	Fire Prevention 1A	2.0
FIRE B51e	Fire Prevention 1B	2.0
FIRE B51i	Fire Prevention 1C	2.0

For State Fire Marshall Office Certification, students must also meet prerequisite requirements: certified Firefighter II or completion 5 three-unit Fire Technology core courses and a minimum of 1 year experience as a paid, full-time firefighter or fire inspector.

Chief Officer Certification (Nfpa Standard 1021)**Required Courses: 22 units**

Course Number	Title	Units
FIRE B50a	Fire Command 2-Command Tactics at Major Fires	2.0
FIRE B50b	Fire Command 2b-Scene Management at Major Incidents	2.0
FIRE B50c	Fire Command 2c-High-Rise Fire Tactics	2.0
FIRE B50d	Fire Command 2d-Management of Large-Scale Disasters	2.0
FIRE B50e	Fire Command 2e-Wildland Fire Tactics	2.0
FIRE B50f	Fire Management 2a-Organizational Development and Human Relations	2.0
FIRE B50g	Fire Management 2b-Finance and Business Management for Chief Officers	2.0
FIRE B50h*	Fire Management 2c-Computer Application for the Fire Service	2.0
FIRE B50i	Fire Management 2d-Master Planning	2.0
FIRE B50j	Fire Management 2e-Staff Assignments and Line Functions	2.0
FIRE B50k*	Fire Investigation	2.0

*Courses are offered from State Fire Marshall's Office only.

Driver/Operator Certification**Required Courses: 5 units**

Course Number	Title	Units
FIRE B59	Fire Service Hydraulics	2.0
FIRE B60	Driver/Operator Certification	3.0

Firefighter I Certification**Required Courses: 11 units**

Course Number	Title	Units
FIRE B61	Fire Fighter Trainee Academy	3.0
FIRE B62	Fire Fighter I Academy	8.0

Firefighter II Certification**Required Courses: 6 units**

Course Number	Title	Units
FIRE B63	Fire Fighter II Academy	6.0

Volunteer Firefighter Certification**Required Courses: 5.5 units**

Course Number	Title	Units
FIRE B64a	Beginning Volunteer Firefighter	1.0
FIRE B64b	Advanced Volunteer Fire Fighter Certification	4.5

CERTIFICATES OF ACHIEVEMENT**Fire Technology Certificate****Required Courses: 29 units**

Course Number	Title	Units
FIRE B1	Introduction to Fire Technology	3.0
FIRE B2 or ENVT B1ab	Fundamentals of Personal Safety and Emergency Action	3.0
FIRE B3 or FIRE B51b	Introduction to Hazardous Materials and Safety Technology	3.0
	Fundamentals of Fire Service Operations	3.0
	Fire Command 1A (2.0)	

FIRE B4	Fundamentals of Fire Protection Chemistry	3.0
FIRE B5 or FIRE B51d & FIRE B51e	Fundamentals of Fire Prevention	3.0
	Fire Prevention 1A (2.0)	
	Fire Prevention 1B (2.0)	
EMTC B1	Emergency Medical Care	4.0

General Education Courses: at least 5 units

ENGL B60 or ENGL B1 or ENGL B1a	Basic Writing Skills	4.0
	Introductory Composition	
	Expository Composition	
PSYC B1a or SOCI B1	General Psychology	3.0
	Introduction to Sociology	
SPCH B1	Speech Communication	3.0

Note: FIRE B1 and B2 are waived for students who have a minimum of 2 years service as a paid, full-time firefighter. Elective Fire Technology courses or 6 units of fire service related cooperative work experience 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.

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 criminal justice agencies which are wide and varied.

Required Courses: 24 units

Course Number	Title	Units
ADMJ B1	Introduction to Administration of Justice	3.0
ADMJ B2	Criminal Law	3.0
ADMJ B3	Introduction to Evidence	3.0
ADMJ B4	Constitutional Criminal Procedure	3.0
ADMJ B5	Community Relations	3.0
ADMJ B12	Legal and Scientific Aspects of Evidence	3.0

Electives: at least 6 units.

Course Number	Title	Units
ADMJ B8	Criminal Investigation	3.0
ADMJ B9	Juvenile Procedures	3.0
ADMJ B10	Organized Crime	3.0
ADMJ B16	Supervision and Leadership	3.0

Recommended for CSU

Course Number	Title	Units
ADMJ B9	Juvenile Procedures	3.0
ADMJ B12	Legal and Scientific Aspects of Evidence	3.0
PSYC B1a	General Psychology	3.0
SOCI B1	Introduction to Sociology	3.0

Correctional Administration

Corrections is the part of the criminal justice system responsible for 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. This pattern of coursework has been endorsed by the Joint Apprenticeship Committee of the California Department of Corrections, California Youth Authority, and the California Correctional Peace Officers Association as a program which would be of benefit to apprentices and correctional peace officers.

Required Courses: 21 units

Course Number	Title	Units
CADM B1	Introduction to Correctional Administration	3.0
CADM B2	Institutional Supervision and Treatment of the Offender	3.0
CADM B3	Fundamentals of Interviewing and Counseling	3.0
CADM B50	Correctional Writing	3.0
CADM B60	Legal Aspects of Corrections	3.0
ADMJ B2	Criminal Law	3.0

Electives: at least 3 units

Course Number	Title	Units
ADMJ B5	Community Relations	3.0
ADMJ B9	Juvenile Procedures	3.0
CADM B4	Fundamentals of Probation and Parole	3.0

Fire Technology

Required Courses: 22 units

Course Number	Title	Units
FIRE B1	Introduction to Fire Technology	3.0
FIRE B2	Fundamentals of Personal Fire Safety and Emergency Action	3.0
FIRE B3	Fundamentals of Fire Service Operations	3.0
FIRE B4	Fundamentals of Fire Protection Chemistry	3.0
FIRE B5	Fundamentals of Fire Prevention	3.0
FIRE B6	Fundamentals of Fire Protection Systems and Equipment	3.0
FIRE B72h	Emergency Medical Technician 1-Non-Ambulance	4.0

ASSOCIATE IN SCIENCE DEGREE PROGRAM

Fire Technology

Required Courses: 32 units

Course Number	Title	Units
FIRE B1	Introduction to Fire Technology	3.0
FIRE B2	Fundamentals of Personal Fire Safety and Emergency Action	3.0
FIRE B3	Fundamentals of Fire Service Operations	3.0
FIRE B4	Fundamentals of Fire Protection Chemistry	3.0
FIRE B5	Fundamentals of Fire Prevention	3.0
FIRE B6	Fundamentals of Fire Protection Systems and Equipment	3.0
FIRE B72h	Emergency Medical Technician 1-Non-Ambulance	4.0
FIRE B51a	Fire Management 1A	2.0
FIRE B51b	Fire Command 1A	2.0
FIRE B51c	Fire Command 1B	2.0

FIRE B51d	Fire Prevention 1A	2.0
FIRE B51e	Fire Prevention 1B	2.0

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

ADMINISTRATION OF JUSTICE

Credit limitations may apply. For specific information see a counselor and the department chair. Visit the Criminal Justice Department website at www2.bc.cc.ca.us/criminaljus/

ADMJ B1 Introduction to Administration of Justice (3 units)

History and philosophy of justice as it evolved throughout the world; an overview of America's criminal justice system and its sub-systems; roles and role expectations of criminal justice professionals; theories of crime causation, punishment and rehabilitation; ethics, and multicultural awareness and education. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges. (CAN AJ 2)

ADMJ B2 Criminal Law (3 units)

Historical development, philosophy of law and constitutional provisions; definitions, classification of crimes, and their application to the criminal justice system; legal research, review of case law, methodology and concepts of law as a social force. Explores crimes against persons, property, and the state as a social, religious, and historical ideology. Fulfills educational requirements of C.P.O.S.T. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

ADMJ B3 Introduction to Evidence (3 units)

Origin, development, philosophy and constitutional basis of the law 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 viewed from a conceptual level. **Recommended:** Reading Level 5 or 6.

Hours: (54) 3 lect. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ADMJ B4 Constitutional Criminal Procedure (3 units)

Legal processes from pre-arrest, arrest through trial, sentencing and correctional procedures; a review of the history of case and common law; conceptual interpretations of law as reflected in court decisions; a study of case law methodology and case research as the decisions impact upon the procedures of the justice system. **Recommended:** Reading Level 5 or 6 and/or ADMJ B2 and/or ADMJ B3. **Hours:** (54) 3 lect.

Offered: S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ADMJ B5 Community Relations (3 units)

The relationship of criminal justice agents and the community; causal and symptomatic aspects of community perceptions; lack of cooperation and trust; study of behavioral causes; strategies to develop and enhance multi-cultural awareness and harmonious relationships. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **Offered:** F. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

ADMJ B8 Criminal Investigation (3 units)

Fundamentals of criminal investigation; investigator skill requirements; modus operandi determination; the collection, identification and preservation of physical evidence; crime scene investigation; interviews and interrogations; sources of information; surveillance; field note-taking and report writing; courtroom preparation; and the investigation of specific crimes. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

(CAN AJ 8)

ADMJ B9 Juvenile Procedures (3 units)

Techniques of handling juvenile offenders and victims; prevention and repression of delinquency, diagnosis and referral; organization of community resources; juvenile law and juvenile court procedures. **Recommended:** Reading Level 5 or 6 and/or ADMJ B1. **Hours:** (54) 3 lect. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ADMJ B10 Organized Crime (3 units)

Interrelations of organized crime to the community; impact of covert criminal activities upon the social structure; symptoms of organized crime activity, i.e., narcotics and white collar crime; political influences in the legal system; and manage-

ment of crime control units. **Recommended:** Reading Level 5 or 6 and/or ADMJ B1. **Hours:** (54) 3 lect. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ADMJ B12 Legal and Scientific Aspects of 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. Fingerprint examinations, classification and preservation of prints. Familiarization with polygraph examination. 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. Rules of evidence and testimony at trial. **Recommended:** Reading Level 5 or 6 and/or ADMJ B3. **Hours:** (54) 3 lect and assigned field trips. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ADMJ B16 Supervision and Leadership (3 units)

Study of supervisory and leadership principles in law enforcement environment; supervisory roles, functions, and responsibilities; communicating, interviewing and counseling; employees' complaints, grievances, and performance evaluations; personnel deployment, and training. Fulfills educational requirements of C.P.O.S.T. **Recommended:** Reading Level 5 or 6 and/or ADMJ B1. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ADMJ B60 PC 832, Arrest and Control Techniques (2 units)

Provides students with the required competencies and certifications in PC 832, Arrest & Control Techniques. **Hours:** (40) 6 lect, 4 lab for 4 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

ADMJ B61 PC 832 Firearms Training (1 unit)

Provides students with the required competencies and certifications in PC 832 Firearms. Student must be legally able to possess a firearm. **Prerequisite:** ADMJ B60. **Hours:** (24) 7 lect, 5 lab for 2 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

ADMJ B62 Campus Security (1 unit)

Provides students with the required competencies in accordance with SB1626. **Hours:** (32) 8 lect, 8 lab for 2 weeks. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

ADMJ B68 Peace Officers' Basic Academy (P.O.S.T.) (16 units)

Provides students with competencies set forth by P.O.S.T. to obtain a position as an entry-level peace officer. Covers

introduction to law enforcement, administration of justice, criminal law, evidence and investigation, community-police relations, patrol procedures, traffic control, juvenile procedures, physical fitness, defensive tactics, firearms, first aid and CPR, vehicle operations, domestic violence, field training and evaluation, and other related basic law enforcement topics. **Hours:** (760) 22 lect, 18 lab for 19 weeks. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

ADMJ B69 Public Safety Dispatcher (4 units)

Provides students with the required competencies and certifications for P.O.S.T. Public Safety Dispatcher. **Hours:** (120) 15 lect, 5 lab for 6 weeks. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

ADMJ B70a Advanced Officer Training P.O.S.T. (0.5 unit)

Cardiopulmonary resuscitation refresher (S and K Module #8); explosives and bomb familiarization (S & K Module #9); and critical issues facing law enforcement (S & K Module #10). Meets Commission on P.O.S.T. mandate for continuing professional training for all California peace officers. **Hours:** (9) 9 lect for 1 week. **Offered:** F, S, SS **CCS:** Occupational Education **Not Transferable:** Not degree applicable.

ADMJ B75 Managing Cultural Diversity in the Workplace (3 units)

Effective global management skills which are needed to benefit from an expanding international market, improve business communication with foreign nationals and minorities, and master the art of business protocol and cross-cultural courtesy; multicultural diversity occurring in the workplace; provides services to a multicultural population. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent course, MGMT B75.

CORRECTIONAL ADMINISTRATION

Credit limitations may apply. For specific information see a counselor or the transfer institution. Visit the criminal justice website at www2.bc.cc.ca.us/criminaljus/

CADM B1 Introduction to Correctional Administration (3 units)

A survey of the total "correctional cycle" and the relationships of its components. Included are: historical, theoretical and philosophical explanations of criminal behavior; statistics and research findings; employment opportunities; employment requirements. Fulfills educational requirements of C.P.O.S.T. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

CADM B2 Institutional Supervision and Treatment of the Offender (3 units)

A survey of the basic knowledge and skills required of corrections personnel including treatment and supervision of offenders: programs, procedures, legal issues, and research in the correctional setting. **Recommended:** Reading Level 5 or 6 and/or CADM B1 (may be taken concurrently). **Hours:** (54) 3 lect/disc. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

CADM B3 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. **Recommended:** Reading Level 5 or 6 and/or CADM B1 (may be taken concurrently). **Hours:** (54) 3 lect/disc. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

CADM B4 Fundamentals of Probation and Parole (3 units)

Theory and techniques of probation/parole supervision, including historical development with emphasis on recent programs, research, and development in the field. **Recommended:** Reading Level 5 or 6 and/or CADM B1 (may be taken concurrently). **Hours:** (54) 3 lect/disc. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

CADM B50 Correctional Writing (3 units)

Emphasizes the practical aspects of gathering, organizing, and preparing written reports for correctional activities on local, state and federal levels. Covers techniques of communicating facts, information, and ideas effectively in a simple, clear and logical manner for various types of criminal justice system reports, letters, memos. Fulfills educational requirements of C.P.O.S.T. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CADM B54 Corrections Academy (7 units)

Introductory correctional officer training covering legal issues, administration management, operational responsibilities and report writing. **Hours:** (160) 16 lect for 10 weeks. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

CADM B57 Juvenile Counselor Academy (6 units)

Intended for students pursuing a career as Juvenile Counselors. Covers legal issues, classifications, interpersonal relationships and communication. Approved by State of California Standards and Training for Corrections (STC) for entry level Juvenile Counselors. **Hours:** (144) 16 lect for 9 weeks. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

CADM B58 Corrections Food Service Academy (4 units)

Covers legal issues, interpersonal relationships and communications between staff and inmates, writing reports, testifying in court, first aid and CPR, kitchen fire safety and preparation of meals under Title 15 requirements and guidelines. **Hours:** (120) 20 lect, 20 lab for 3 weeks. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

CADM B60 Legal Aspects of Corrections (3 units)

A survey of legal issues in the corrections environment, the civil rights of prisoners and responsibilities and liabilities of corrections officials. The historical framework, concepts and precedents that guide correctional practice. Fulfills educational requirements of the C.P.O.S.T. **Hours:** (54) 3 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

CADM B70a Inmate Work/Training Incentive Program And Completing State Forms (0.5 Unit)

Intended for people working in the field of corrections. Provides training to document an inmate's performance in a work or academic assignment; also covers the use of written reports. Approved by State of California Standards and Training for Corrections (STC). **Hours:** (9) 9 lect for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

CADM B70b Prison Gangs and Employee Post Trauma Program (0.5 unit)

Intended for people working in the field of corrections and law enforcement. Covers gang identification/activities and identifying post trauma syndrome. Approved by State of California Standards and Training for Corrections (STC). **Hours:** (9) 9 lect for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

CADM B70c IST Drugs, Phase II & CCF Fire Safety (0.5 unit)

STC certified inservice training course primarily for individuals employed in the corrections field. Covers drug use recognition among inmates and CCF fire safety procedures in a correctional facility. **Hours:** (9) 9 lect for 1 week. **Repeat:** As needed for mandated training. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

CADM B70d First Aid and CPR for Corrections (0.5 unit)

Covers various aspects of CPR and First Aid including knowing when to administer CPR, how to position a victim for rescue breathing, proper CPR techniques for adults and children, and giving first aid to an unconscious or conscious choking victim. **Hours:** (9) 9 lect for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

CADM B70e Anatomy of a Setup/Games Inmates Play (0.5 unit)

Covers situations and various strategies correctional officers must be aware of when dealing with inmates. How to recognize and handle a potentially dangerous situation. **Hours:** (9) 9 lect for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

CADM B70f Hostage Survival/Conflict Resolution (0.5 unit)

Covers situations and various strategies correctional officers must be aware of to avoid being taken as a hostage. Also covers defusing hostile situations that may develop in correctional institutions between inmates and staff using conflict resolution techniques. **Hours:** (9) 9 lect for 1 week. **Repeat:** Unlimited. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

CADM B72 O.C. Pepper Spray (0.5 unit)

Intended for peace officers, correctional officers, juvenile counselors and probation officers. Provides the required competencies and certification in the use of O.C. Pepper Spray. Approved by P.O.S.T. **Hours:** (9) 4.5 lect. For 2 weeks. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

CADM B80 Supervisor Training for Peace Officers (2 units)

Intended for peace officers, correctional officers, juvenile counselors and probation officers who have been newly promoted to supervisory positions. Provides the required competencies and certification in supervisory training. Approved by State of California Standards and Training for Corrections (STC). **Hours:** (80) 20 lect, 20 lab for 2 weeks. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE TECHNOLOGY

Credit limitations may apply. For specific information see a counselor or the transfer institution. Visit the Fire Technology website at www2.bc.cc.ca.us/firetech/

FIRE B1 Introduction to Fire Technology (3 units)

Introduction to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics, introduction to fire protection systems; introduction to fire strategy and tactics. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc/demo. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

FIRE B2 Fundamentals of Personal Fire Safety and Emergency Action (3 units)

Basic skills in assessing fire dangers, handling common fire situations in the home and/or industry, basic Cardio-Pulmonary Resuscitation and Standard First Aid. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc/demo. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

FIRE B3 Fundamentals of Fire Service Operations (3 units)

Fundamentals of fire department organization, management, and resources, and the use of those resources to control various emergencies. **Prerequisite:** FIRE B1 or equivalent. **Hours:** (54) 3 lect/disc/demo. Field trip required. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

FIRE B4 Fundamentals of Fire Protection Chemistry (3 units)

Fundamental information and knowledge of the physical and chemical characteristics of matter, fire hazardous materials, and basic extinguishment theory. **Prerequisite:** FIRE B1 or equivalent. **Hours:** (54) 3 lect/disc/demo. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

FIRE B5 Fundamentals of Fire Prevention (3 units)

Provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationship of fire prevention with fire safety education and detection and suppression systems. **Prerequisite:** FIRE B1 or equivalent. **Hours:** (54) 3 lect/disc/demo. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

FIRE B6 Fundamentals of Fire Protection Systems and Equipment (3 units)

Provides information relating to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers. **Prerequisite:** FIRE B1 or equivalent. **Hours:** (54) 3 lect/disc/demo. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

FIRE B50a Fire Command 2A-Command Tactics at Major Fires (2 units)

Concepts and methods for Chief Officers 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 (C.F.S.T.E.S.) for Chief Officer certification. **Prerequisite:** FIRE B51b or FIRE B51c. **Hours:** (40) 40 lect for 1 week.

Offered: F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B50b 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:** FIRE B50a or equivalent. **Hours:** (40) 40 lect/disc for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B50c Fire Command 2C - High Rise Fire Tactics (2 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 B51b. **Hours:** (40) 27 lect, 13 lab for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B50d Fire Command 2D - Management of Large-Scale Disasters (2 units)

Essential management techniques for Chief Officers needed to control major disasters. Developing and writing plans for disaster control and managing local disasters emphasized. Accredited by the California Fire Service Training and Education System (C.F.S.T.E.S.) for Chief Officer certification. **Prerequisite:** FIRE B50a or equivalent. **Hours:** (40) 40 lect for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B50e 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.E.S. Chief Officer certification requirements. **Prerequisite:** FIRE B50a. **Hours:** (40) 36 lect, 4 lab for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B50f Fire Management 2A-Organizational Development and Human Relations (2 units)

Provides sound management principles in preparation for Chief Officer. Includes internal and external influences; personal behavior of fire fighters; managing human relations through group dynamics; and problem solving techniques. Accredited by the California Fire Service Training and

Education System (C.F.S.T.E.S.) for Chief Officer Certification. **Prerequisite:** FIRE B51a. **Hours:** (40) 36 lect, 4 lab for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B50g Fire Management 2B - Fire Service Financial Management (1 unit)

Provides insight into the cyclical nature of budgeting and financial management. Chief officers, company officers, staff officers, or other fire service managers will become familiar with essential elements of financial planning, budget preparation, budget justification, and budget controls. **Hours:** (40) 18 lect, 22 lab for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Degree applicable only.

FIRE B50i Fire Management 2D - Master Planning (2 units)

Long-range fire protection planning. Emphasizes 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:** FIRE B50f. **Hours:** (40) 36 lect, 4 lab for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B50j 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.E.S. for Chief Officer certification. **Prerequisite:** FIRE B50f. **Hours:** (40) 40 lect/disc for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B51a Fire Management 1A (2 units)

Planning, operating and controlling the personnel functions necessary to become a company officer. Emphasizes training, counseling, managing the development of a firefighter, participating in departmental grievance procedures, managing discipline, morale, safety standards and diversity in the workplace. **Prerequisite:** FIRE B1 or equivalent. **Hours:** (40) 40 lect/disc for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B51b Fire Command 1A (2 units)

Fundamental information and experience in command and control techniques at emergency locations. Emphasizes commanding, the authority or right to command, personnel, organization or area under a commander and the performance requirements for Fire Service Officers. **Prerequisite:** FIRE B1 or equivalent. **Hours:** (36) 36 lect/disc for 1 week.

Offered: F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B51c Fire Command 1B (2 units)

Information and experience in command and control techniques used at the scene of hazardous material incidents. Emphasizes 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:** FIRE B51b. **Hours:** (36) 36 lect for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B51d Fire Prevention 1A (2 units)

Basic skills and knowledge necessary for Fire Prevention Officer 1. Legal responsibilities and fire hazard characteristics of various materials are included. **Prerequisite:** FIRE B5 or equivalent. **Hours:** (36) 36 lect for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B51e Fire Prevention 1B (2 units)

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. **Prerequisite:** FIRE B51d. **Hours:** (36) 36 lect for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B51f Fire Investigation 1A (2 units)

Arson investigators will successfully carry out their responsibilities in arson detection and explosives investigation. Emphasizes essential elements of fire and explosives behaviors, types and use of laboratory services, and investigative responsibilities of an investigator at location of arson and explosives incidents. Meets P.O.S.T. certification requirements. **Prerequisite:** FIRE B62 or equivalent. **Hours:** (40) 40 lect for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B51g Fire Instructor 1A (2 units)

In-service training programs emphasizing occupational analysis, course outlines, concepts of learning, levels of instruction, behavioral objectives, lesson plans, the psychology of learning, evaluation of effectiveness and student teaching demonstrations are included. **Prerequisite:** FIRE B50. **Hours:** (40) 36 lect/4 lab for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B51h Fire Instructor 1B (2 units)

Continuation of FIRE B51g. Emphasizes instructors' roles and responsibilities, course outline development, lesson plan review, instructional aid development, fundamentals of testing and measurements, and student teaching demonstrations.

Prerequisite: FIRE B51g. **Hours:** (40) 36 lect/4 lab for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B51i Fire Prevention 1C (2 units)

Special hazards associated with flammable and combustible liquids and gases. Topics include bulk storage and handling, transportation of flammable gases and liquids. Meets NFPA 1031 Fire Inspection Professional Qualifications and California State Board of Fire Services Standards for Fire Prevention Officer 1. **Prerequisites:** FIRE B51d, FIRE B 51e. **Hours:** (36) 36 lect/disc for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B51j Fire Investigation 1B (2 units)

Continuation of FIRE B51f adds topics of discussion including the juvenile fire setter, report writing, evidence collection and preservation procedures. Course meets P.O.S.T. certification requirements. **Prerequisites:** FIRE B51f or evaluation by instructor. **Hours:** (40) 40 lect/disc for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B59 Fire Service Hydraulics (2 units)

Assist fire fighters, pump operators and engineers in meeting the requirements for Fire Apparatus Driver/Operator certification. Content covers characteristics of water, friction loss, engine pressure, multiple lines, unequal layouts, pump and pumpers and field equations. **Recommended:** MATH B50 or equivalent. **Hours:** (36) 3 lect per week for 12 weeks or 36 for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B60 Driver/Operator Certification (3 units)

Knowledge and skills in pump operations for fire engineers. 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. **Recommended:** FIRE B62. **Hours:** (129) 8 lect/8 lab for 8 weeks. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B61 Fire Fighter Trainee Academy (3 units)

Basic educational and practical training essential for firefighter trainees. Emphasizes 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. **Recommended:** Reading Level 4. **Hours:** (120) 13.5 lect/16.5 lab for 4 weeks. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B62 Fire Fighter I Academy (8 units)

Basic educational and practical training essential for Fire Fighter I. Advanced study 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. **Recommended:** FIRE B1, B2, B3, B4, B5, B6 or equivalent. **Hours:** (320) 18 lect/22 lab for 8 weeks. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B63 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. **Recommended:** FIRE B62 or equivalent. **Hours:** (235) 235 lect/lab for a total of 40 weeks. Field trips required. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B64a Beginning Volunteer Firefighting (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 cardiopulmonary resuscitation procedures used by Fire Departments. Also includes areas of fire behavior and tactics; pumping procedures; hose evolutions, and ground ladder procedures. **Hours:** (18) 18 lect for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B64b Advanced Volunteer Fire Fighter Certification (4.5 units)

Basic knowledge and skills in fire fighting practices for volunteers. Includes 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. **Recommended:** Evaluation by instructor. **Hours:** (144) 13.5 lect, 22.5 lab for 4 weeks. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B65 Fire Service Staff Development Training (3 units)

Staff development training that provides students with contemporary fire fighting techniques. Topics include the latest concepts involving: organizational development; fire services appliances; fire chemistry; automatic fire extinguisher and agents; fire prevention and enforcement; arson investigation; public safety; hazardous materials control and enforcement; mutual aid/joint powers agreement; communi-

cations; personal health issues; and emergency rescue techniques. **Hours:** (156) 1 lect, 2 lab. (12 hours per month for 12 months). **Repeat:** 3. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B66 Fire Fighting and Emergency Medical Skills (8 units)

Programs, workshops, seminars, and hose ladders, tools, salvage, chemistry, extinguisher and agents, fire control, prevention, arson, crowd and traffic control, manual aid, communications, fire and health safety, and emergency rescue techniques. Updates the skills of EMT 1 - non-ambulance certificate holders as prescribed by law. **Hours:** (189) 1 lect, 2.5 lab. for 52 weeks. **Repeat:** Unlimited. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B70a Hazardous Materials for First Responders (0.5 unit)

Mandated by law or called upon by necessity to assess, plan for, and initiate mitigation of incidents involving hazardous materials. Content covers the extent and nature of today's hazardous materials problem, effects of weather, topography, and environmental conditions on the behavior of hazardous materials and the containment efforts these conditions require. **Recommended:** FIRE B1 or equivalent. **Hours:** (36) 18 lect/18 lab for 1 week. **Repeat:** 1. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B70b First Responder Operational-Decontamination (0.5 unit)

Provide members of a decontamination team at a hazardous materials incident with a primary understanding of the processes used in decontamination and the knowledge to perform in a safe and competent manner to limit the spread of contamination. **Hours:** (9) 9 lect/demo for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B70c Hazardous Materials Incident Commander/Scene Manager (1 unit)

Provide students with competencies needed to assume the role of an Incident Commander, as well as leadership skills for any other Command of Staff Incident Command System positions which are necessary during a hazardous materials incident. Content will also accentuate personnel safety and management. **Hours:** (36) 36 lect/demo for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B70d Hazardous Materials Tech/Spec 1A: Basic Chemistry (1 unit)

Technical training in the physical and chemical terminology important to hazardous materials technicians/specialists and prevention officers, ability to determine properties of a chemical compound by name or formula. Includes study of important terms which describe properties, reactions with

other materials, and the effects upon human beings, environment, and property. Applies to Hazardous Materials Technician/Specialist certification. **Hours:** (40) 18 lect, 22 lab for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B70e Hazardous Materials Tech/Spec 1B: Applied Chemistry (1 unit)

A review of the basic terminology and theory of chemistry as it relates to hazardous materials incident management. Content includes: hazard and risk management; behavior and effect of toxicant and the major biological systems affected by toxicant; as well as using monitoring equipment to detect hazardous atmospheres and unknown solids and liquids. Applies to Hazardous Materials Technician/Specialist I certification. **Hours:** (40) 40 lect for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B70f Hazardous Materials Tech/Spec 1C: Incident Considerations (1 unit)

Content covers hazardous materials data research; meteorological considerations that influence hazardous materials response activities; hazardous materials incidents command concepts associated with response activities; incident specific considerations that influence hazardous materials response activities; and legislative and regulatory policies that impact hazardous materials response activities. Applies to Hazardous Materials Technician/Specialist certification. **Hours:** (40) 40 lect for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B70g Hazardous Materials Tech/Spec 1D: Tactical Field Operations (1 unit)

Information on confinement, including diking, dams and sorbent; awareness on plugging and patching; application of chemical protective clothing; preservation of evidence; and emergency medical considerations at a hazardous materials incident. Applies to Hazardous Materials Technician/Specialist certification. **Hours:** (40) 40 lect for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B70h Hazardous Materials Tech/Spec 1E: Special Mitigation Techniques (1 unit)

Content covers medical monitoring guidelines; use of Level "A" chemical protective clothing; repair leaks on a rail tank car; procedures to simulate off-loading hydrocarbons from a rolled over DOT MC-306//406 aluminum tank truck; and practice as member of a haz mat team in simulated hazardous materials incidents. Applies to Hazardous Materials Technician/Specialist certification. **Hours:** (40) 40 lect/demo for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B70i Hazardous Materials Tech/Spec 1F:Advanced Field Operations (1 unit)

Practical application of methods and procedures to mitigate leaking containers; transferring hazardous materials between containers; classifying known and unknown chemicals participating as a member of haz mat team in simulated hazardous materials incidents; and exercising safe methods while operating at hazardous materials incidents. Applies to Hazardous Materials Technician/Specialist certification. **Hours:** (40) 40 lect/demo for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B71a 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. **Recommended:** Evaluation by instructor. **Hours:** (40) 9 lect/31 lab for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B71b Seasonal Firefighter Basic Training 2 (1.5 units)

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. **Recommended:** Evaluation by instructor. **Hours:** (40) 9 lect, 31 lab for 1 week. **Repeat:** 2. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B71e Wildland Fire Behavior and Control (0.5 unit)

Basic watershed fire behavior. Environmental factors of fire behavior which start and spread watershed fires, and basic fire suppression methods applicable to breaking the fire triangle are emphasized. Meets National Interagency Incident Management System certification. **Hours:** (9) 9 lect/discussion for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B72abc Heavy Duty Rescue 1-2-3 (0.5-0.5-1 unit)

Technical knowledge and practical skills necessary to successfully perform heavy duty rescue emergencies. Emphasizes methods and procedures for utilizing heavy duty 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. **Recommended:** FIRE B2, FIRE B72h 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. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B72d Swift Water Rescue (1 unit)

Basic techniques necessary to perform emergency rescue procedures involving swift water rivers. Emphasizes basic rescue knot practices, handling small rescue boats, emergency care, and controlling special hazards and problems in swift water emergencies. **Hours:** (30) 18 lect/12 lab for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B72e Advanced Swift Water Rescue (1 unit)

Refinement of 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. **Recommended:** FIRE B72d. **Hours:** (20) 20 lect/manipulative exercises for 1 week. Field trips required. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B72f Auto Extrication (0.5 unit)

A systematic approach to vehicle rescue, and the use of mechanical and hand tools used in the extrication process. **Hours:** (18) 9 lect/9 lab for 1 week. Field trips required. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B72g Aircraft Fire Protection and Rescue Procedures (1 unit)

Information, methods and techniques necessary for providing crash fire rescue services at airports. Includes utilizing conventional fire apparatus and specialized crash fire rescue apparatus, crash fire rescue, extinguishing agents, various types of aircraft and operations at crash scenes. **Recommended:** FIRE B62. **Hours:** (36) 18 lect, 18 lab for 1 week. Field trips required. **Repeat:** 3. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B72h Emergency Medical Technician I - Non-Ambulance (4 units)

Techniques of emergency medical care presently considered within the responsibilities of the Emergency Medical Technician as well as all operational aspects. Emphasizes the development of student skills in recognizing symptoms of illness and injuries, and proper procedures of emergency care. Meets California State Department of Health and State Board of Fire Services criteria for EMT 1-NA Training. **Recommended:** FIRE B1 and/or FIRE B50a. **Hours:** (128) 72 lect/56 demo/practical exercises. Field trips required. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

FIRE B72i EMT 1 - Non-ambulance Recertification (1 unit)

Updates the skills of EMT 1- Non-Ambulance Certificate holders as prescribed by law. Reviews and updates material in FIRE B72h - EMT 1 - Non-Ambulance. **Recommended:**

Possession of a valid EMT 1 - NA Certificate which is current in Kern County. **Hours:** (28) 16 lect/12 lab for 1 week. **Repeat:** Unlimited. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B74 Petroleum Fire Procedures (0.5 unit)

Practical experiences in various fire fighting procedures involving flammable liquid fire emergencies, at/or near petroleum installations. Includes utilization of safety practices and extinguishment of various types of petroleum product fires. Certified by the California State Fire Service Training and Educational Program. **Recommended:** FIRE B50a or equivalent. **Hours:** (9) 3 lect/6 lab manipulative exercises for 1 day. **Repeat:** 1. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B75 Fire Fighting Techniques (0.5 unit)

Advanced techniques of fire control involving the utilization of personnel, equipment, and extinguishing agents in emergency situations. **Recommended:** FIRE B62. **Hours:** (9-27) 9-27 lect/lab. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B77 Advanced Structure Fire Training (0.5 unit)

Latest techniques in structure fire control. Specialized fire fighting techniques used to control residential, commercial and high-rise building fires. **Recommended:** FIRE B62. **Hours:** (9-36) 9-36 lect/lab. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B78 Advanced Officer Training (0.5 unit)

Contemporary techniques of supervision, concentrating on supervision techniques identified by local fire service agencies. **Recommended:** FIRE B62. **Hours:** (9-36) 9-36 lect/lab for 1 week. **Repeat:** 1. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B79 Instructor Orientation (0.5 unit)

Assists fire technology instructors with information needed to properly administer classroom activities. State certification system, administrative procedures, curriculum development and organization, publication format and style, and teaching strategies for accredited regional courses are emphasized. **Recommended:** FIRE B51g, FIRE B51h. **Hours:** (9-24) 9-24 lect/lab for one week or 1 day. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B81 Orientation to Fire Technology (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. **Recommended:** FIRE B51g, FIRE B51h. **Hours:**

(9-24) 9-24 lect/disc for 1 week. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B83 Topics in Incident Command System Part I (0.5-1.5 units)

Twenty-six professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System. **Hours:** (9-72) 9-72 lect/disc for up to 2 weeks. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

FIRE B83a P-151 Wildfire Origin and Cause Determination (0.5 unit)

FIRE B83b S-205 Fire Operations in the Urban Interface (0.5 unit)

FIRE B83c S-217 Interagency Helicopter Training Guide (0.5 unit)

FIRE B83d I-244 Field Observer/Display Processor (0.5 unit)

FIRE B83e S-230 Single Resource Boss-Crew (0.5 unit)

FIRE B83f S-234 Firing Methods and Procedures (0.5 unit)

FIRE B83g I-254 Base/Camp Manager (0.5 unit)

FIRE B83h S-271 Helibase Manager (0.5 unit)

FIRE B83i S-270 Basic Air Operations (0.5 unit)

FIRE B83j S-290 Intermediate Wildland Fire Behavior (0.5 unit)

FIRE B83k S-300 Incident Commander, Multiple Resources Extended Attack (0.5 unit)

FIRE B83L S-336 Fire Suppression Tactics (0.5 unit)

FIRE B83m I-333 Strike Team Leader/Crew (0.5 unit)

FIRE B83n I-334 Strike Team Leader/Engine (0.5 unit)

FIRE B83o I-335 Strike Team Leader/Dozer (0.5 unit)

FIRE B83p I-339 Division/Group Supervisor (0.5 unit)

FIRE B83q I-346 Situation Unit Leader (0.5 unit)

FIRE B83r I-347 Demobilization Unit Leader (0.5 unit)

FIRE B83s I-348 Resources Unit Leader (0.5 unit)

FIRE B83t I-354 Facilities Unit Leader (0.5 unit)

FIRE B83u I-355 Ground Support Unit Leader (0.5 unit)

FIRE B83v I-356 Supply Unit Leader (0.5 unit)

FIRE B83w I-357 Food Unit Leader (0.5 unit)

FIRE B83x I-358 Communications Unit Leader (1.5 units)

FIRE B83y I-365 Time Unit Leader (0.5 unit)

FIRE B83z I-368 Procurement Unit Leader (0.5 unit)

FIRE B84 Topics in Incident Command System: Part II (0.5 unit)

Twenty-two professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service agencies in meeting certification standards set forth by the National Interagency Incident Management System. **Hours:** (12-40) 12-40 lect/disc for 1-2 weeks.

Offered: F, S, SS. **CCS:** Occupational Education. **Not**

Transferable: Not degree applicable.

FIRE B84a I-374 Helicopter Coordinator

FIRE B84b I-375 Air Support Supervisor

FIRE B84c I-376 Air Tanker Coordinator

FIRE B84d I-378 Air Attack Supervisor

FIRE B84e I-400 Incident Commander

FIRE B84f I-401 Safety Officer

FIRE B84g I-403 Information Officer

FIRE B84h I-420 Command and General Staff

FIRE B84i I-430 Operation Section Chief

FIRE B84j I-440 Planning Section Chief

FIRE B84k I-450 Logistics Section Chief

FIRE B84L I-460 Finance Section Chief

FIRE B84m I-470 Air Operations Branch Director

FIRE B84n S-370 Intermediate Air Operations

FIRE B84o S-390 Introduction to Wildland Fire Behavior Calculations

FIRE B84p S-490 Advanced Wildland Fire Behavior Calculations

FIRE B84q PMS-415 Introduction to Wildland Fire Suppression for Rural Fire Departments

FIRE B84r ICS 260-CWN (Call When Needed) Helicopter Module Leader

FIRE B84s S 260 Fire Business Management Principles

FIRE B84t ICS S-213 Dozer Boss

FIRE B84u ICS-I 330 Strike Team/Task Force Leader

FIRE B84v ICS-5331 Crew Representative

PUBLIC ADMINISTRATION COURSES

PADM B1 Introduction to Public Administration (3 units)

Overview of the historical roots and contemporary status of administration of public programs; their leadership, design, organization, structure, control, planning, resources, financial management, human resources, policy and program evaluation and improvement. Examines problems and trends in federal state and local government as well as nonprofit organizations as a career field. **Hours:** (54) 3 lect. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU Bakersfield.

Physical Science

Architecture

Astronomy

Chemistry

Engineering

Geography

Geology

Physical Science

Physics

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.

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.

CERTIFICATE OF COMPLETION

Architectural CAD

Required Courses: 15 units

Course Number	Title	Units
INDR B10	Introduction to Industrial Drawing & Graphics	1.0
INDR B11	Introduction to Computer Aided Drafting & Design (CAD)	1.0
INDR B20a	Computer Aided Drafting & Design CAD	3.0
ARCH B6	Materials of Construction	3.0
ARCH B31	Architectural Practice	3.0
ARCH B32	Architectural Computer Graphics	1.0
ARCH B33	Architectural Computer Practice	3.0

ASSOCIATE DEGREE PROGRAMS

Associate in Arts degrees can be earned in most areas by fulfilling college major and General Education requirements. The Associate in Science Degree is available to those who complete the course of study defined for the major as well as the General Education requirements as outlined earlier in this catalog.

Counselors, advisors, and department faculty will aid students in planning for either the Associate in Arts or Associate in Science Degree.

The course requirements for Associate Degree programs are outlined below. The requirements shown are limited to those courses in the subject and related subjects that are needed for the degree. General Education courses as well as minimum competency levels as outlined under Graduation Requirements must be satisfied as well.

In addition to the course requirement list, suggested programs for each area are shown in order to help plan courses of study.

Because students vary in their preparation and in rates of progress through a curriculum, some alteration in the programs as shown is likely in individual cases.

ASSOCIATE IN ARTS DEGREE PROGRAMS

Architectural Drafting

Required Courses: 24.5 units

Course Number	Title	Units
ARCH B1	Introduction to Architecture & Environmental Design	1.5
ARCH B6	Materials of Construction	3.0
ARCH B11	Introduction to Drawing, Perspective & Graphics	4.0
ARCH B12	Basic Graphics, Analysis & Communication Skills	4.0
ARCH B21	Architectural Design Fundamentals I	4.0
ARCH B31	Architectural Practice	3.0
ARCH B32	Architectural Computer Graphics	1.0
ARCH B33	Architectural Computer Practice	3.0
INDR B11	Introduction to Computer Aided Drafting & Design (CAD)	1.0

Electives

Course Number	Title	Units
INDR B20a	Computer Aided Drafting & Design (CAD)	3.0
ARCH B55	Building Codes	3.0
MATH BD	Intermediate Algebra	4.0

ASSOCIATE IN SCIENCE DEGREE PROGRAMS

Architecture/Architectural Drafting

Required Courses: 35.5 units

Course Number	Title	Units
ARCH B1	Introduction to Architecture & Environmental Design	1.5
ARCH B6	Materials of Construction	3.0
ARCH B11	Introduction to Drawing, Perspective & Graphics	4.0
ARCH B12	Basic Graphics, Analysis & Communication Skills	4.0
ARCH B21	Architectural Design Fundamentals I	4.0
ARCH B22	Architectural Design Fundamentals II	4.0
ARCH B31	Architectural Practice	3.0
ARCH B32	Architectural Computer Graphics	1.0
ARCH B33	Architectural Computer Practice	3.0
INDR B11	Introduction to Computer Aided Drafting & Design (CAD)	1.0
MATH BC	Plane Trigonometry	3.0
PHYS B2a	General Physics-Mechanics & Heat	4.0

Recommended Courses

Course Number	Title	Units
INDR B20a	Computer Aided Drafting & Design (CAD)	3.0

Suggested Program for Architecture/Architectural Drafting A.S. Degree

First Semester

Course Number	Title	Units
ARCH B1	Introduction to Architecture & Environmental Design	1.5
ARCH B11	Introduction to Drawing, Perspective & Graphics	4.0
INDR B11	Introduction to Computer Aided Drafting & Design (CAD)	1.0

Second Semester

Course Number	Title	Units
ARCH B6	Materials of Construction	3.0
ARCH B12	Basic Graphics, Analysis & Communication Skills	4.0
MATH BC	Plane Trigonometry	3.0

Third Semester

Course Number	Title	Units
ARCH B21	Architectural Design Fundamentals I	4.0
ARCH B32	Architectural Computer Graphics	1.0
PHYS B2a	General Physics-Mechanics & Heat	4.0

Fourth Semester

Course Number	Title	Units
ARCH B22	Architectural Design Fundamentals II	4.0
ARCH B33	Architectural Computer Practice	3.0

Chemistry

Required Courses: 32 units

Course Number	Title	Units
CHEM B1a	General Chemistry	5.0
CHEM B1b	General Chemistry & Chemical Analysis	5.0
CHEM B8	Elementary Organic Chemistry	3.0
CHEM B9	Organic Chemistry Laboratory	3.0
BIOL B16 or BIOL B3a or BIOL B11	*General Microbiology General Biology I Concepts of Biology (4.0)	5.0
MATH B1 or MATH B6a	Mathematical Analysis *Analytic Geometry & Calculus I	4.0
PHYS B4c or PHYS B2a & PHYS B2b	*Optics & Modern Physics General Physics-Mechanics & Heat General Physics-Sound, Light, Electricity, Magnetism, Modern Physics	4.0
COMS B12 or COMS B11	Introduction to Programming with BASIC Introduction to Programming with Pascal	3.0

*Recommended courses

Electives

PHYS B4a	Mechanics & Wave Motion	4.0
PHYS B4b	Heat, Electricity, & Magnetism	4.0

Suggested Program for Chemistry A.S. Degree

First Semester

Course Number	Title	Units
CHEM B1a or PHYS B2a	General Chemistry General Physics-Mechanics & Heat (4.0)	5.0
MATH B6a or MATH B1	Analytic Geometry & Calculus I Mathematical Analysis	4.0

Second Semester

Course Number	Title	Units
CHEM B1b	General Chemistry & Chemical Analysis	5.0
PHYS B4a	Mechanics & Wave Motion	4.0
PHYS B2b	General Physics-Sound, Light, Electricity, Magnetism, Modern Physics	4.0
MATH B6a or MATH B6b	Analytic Geometry & Calculus I Analytic Geometry & Calculus II	4.0

Third Semester

Course Number	Title	Units
CHEM B8	Elementary Organic Chemistry	3.0
CHEM B9	Organic Chemistry Laboratory	3.0
MATH B6c	Calculus III	4.0
PHYS B4b	Heat, Electricity, & Magnetism	4.0

Fourth Semester

Course Number	Title	Units
PHYS B4c	Optics & Modern Physics	4.0
BIOL B16 or BIOL B3a or BIOL B3b or BIOL B11	General Microbiology General Biology I (5.0) General Biology II (5.0) Concepts of Biology (4.0)	5.0
COMS B12 or COMS B11	Introduction to Programming with BASIC Introduction to Programming with Pascal	3.0

Engineering

Required Courses: 54 units

Course Number	Title	Units
MATH B6a	Analytic Geometry & Calculus I	4.0
MATH B6b	Analytic Geometry & Calculus II	4.0
MATH B6c	Calculus III	4.0
MATH B6d	Ordinary Differential Equations	3.0
CHEM B1a	General Chemistry	5.0
ENGL B1a	Expository Composition	4.0
PHYS B4a	Mechanics & Wave Motion	4.0
PHYS B4b	Heat, Electricity, & Magnetism	4.0
PHYS B4c	Optics & Modern Physics	4.0
ENGR B17	Introduction to Electric Circuits	3.0
ENGR B24	Engineering Graphics & Descriptive Geometry	2.0
ENGR B36	Engineering Mechanics-Statics	3.0
ENGR B45	Properties of Materials	3.0
ENGR B48	Engineering Orientation	1.0
ENGR B19fpc	Computer Programming for Science, Engineering & Technology	3.0

Geology

Required Courses: 30-31 units

Course Number	Title	Units
GEOL B1a	Physical Geology	4.0
GEOL	Electives	7.0
CHEM B1a or CHEM B2a	General Chemistry Introductory General Chemistry	5.0
INDR B10	Introduction to Industrial Drawing & Graphics	1.0
MATH BC	Plane Trigonometry	3.0
MATH BD or COMS B12	Intermediate Algebra Introduction to Programming with BASIC (3.0)	4.0

COMS B11	Introduction to Programming with Pascal	3.0
PHYS B2a	General Physics-Mechanics & Heat	4.0

Suggested Program for Geology A.S. Degree

First Semester

Course Number	Title	Units
INDR B10	Introduction to Industrial Drawing & Graphics	1.0
GEOL B1a	Physical Geology	4.0
MATH BD	Intermediate Algebra	4.0

Second Semester

Course Number	Title	Units
MATH BC	Plane Trigonometry	3.0

Third Semester

Course Number	Title	Units
CHEM B2a	Introductory General Chemistry	5.0
COMS B12	Introduction to Programming with BASIC	3.0

Fourth Semester

Course Number	Title	Units
PHYS B2a	General Physics-Mechanics & Heat	4.0
GEOL	Elective	3.0
GEOL	Elective	2-3.0
	Elective	3.0

Suggested Electives

Course Number	Title	Units
ART B3cd	Three Dimensional Design	3.0
BUS B5	Human Relations & Motivation	3.0

Physics

Required Courses: 37 units

Course Number	Title	Units
PHYS B4a	Mechanics & Wave Motion	4.0
PHYS B4b	Heat, Electricity, & Magnetism	4.0
PHYS B4c	Optics & Modern Physics	4.0
CHEM B1a	General Chemistry	5.0
CHEM B1b	General Chemistry & Chemical Analysis	5.0
MATH B6a	Analytic Geometry & Calculus I	4.0
MATH B6b	Analytic Geometry & Calculus II	4.0
MATH B6c	Calculus III	4.0
COMS B11	Introduction to Programming with Pascal	3.0

SUGGESTED TRANSFER PROGRAMS

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

**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 College of Architecture and Environmental Design at California State Polytechnic 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 by faculty at Cal Poly, S.L.O. Entry as a transfer student to Cal Poly, S.L.O. is based upon a strong grade point average

(G.P.A.), certification of general elective courses, including Calculus B6a, Physics B4a or PHYS B2ab and the architecture courses listed below for the Mutli-Criteria Application (MCA) process.

In the College 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 and Bachelor of Landscape Architecture degrees are five-year programs. The other three 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. This may mean taking course work during the summer or spending an additional year at Bakersfield College and/or at Cal Poly.

In addition, Cal Poly, S.L.O. offers two graduate programs. The Master of Science in Architecture and the Master of City and Regional Planning for those students interested in advanced professional studies.

Architecture

2-year transfer program for those students who are entering college ready to take Calculus (MATH B6A) and English B1A.

Recommended Courses for Transfer to California State

Polytechnic University, S.L.O.

First Semester

Course Number	Title	Units
ARCH B1	Introduction to Architecture & Environmental Design	1.5
ARCH B11	Introduction to Drawing, Perspective & Graphics	4.0
INDR B11	Introduction to Computer Aided Drafting & Design (CAD)	1.0
MATH B6a	Analytic Geometry & Calculus I	4.0

Second Semester

Course Number	Title	Units
ARCH B6	Materials of Construction	3.0
ARCH B12	Basic Graphics, Analysis & Communication Skills	4.0

Third Semester

Course Number	Title	Units
ARCH B21	Architectural Design Fundamentals I	4.0
ARCH B31	Architecture Practice	3.0
ARCH B32	Architectural Computer Graphics	1.0

Fourth Semester

Course Number	Title	Units
ARCH B22	Architectural Design Fundamentals II	4.0
ARCH B33	Architectural Computer Practice	3.0
PHYS B4a	Mechanics & Wave Motion	4.0

Additional recommended courses for Cal Poly, S.L.O. common to all five majors

Course Number	Title	Units
PSYC B1a	General Psychology	3.0
SPCH B1	Speech Communication	3.0
PHIL B7	Introduction to Logic	3.0

Architecture

Course Number	Title	Units
ECON B2	Principles of Economics-Macro	3.0
BIOL B11	Concepts of Biology (Life Science elective)	4.0
GEOG B1	Introduction to Geography: Physical Elements	3.0
COMS B12	Introduction to Programming with BASIC	3.0
PHYS B2b	General Physics - Sound, Light, Electricity, Magnetism, Modern Physics	4.0

Architectural Engineering

Course Number	Title	Units
MATH B6b	Calculus II	4.0
MATH B6c	Calculus III	4.0
MATH B6d	Ordinary Differential Equations	3.0
CHEM B1a	General Chemistry	5.0
GEOL B1a	Physical Geology	4.0
HLED B1	Principles of Health Education	3.0
COMS B12	Introduction to Programming with BASIC (elective)	3.0
ECON B2	Principles of Economics-Macro	3.0
BIOL B11	Concepts of Biology	4.0
MATH B22	Elementary Probability & Statistics	5.0

Construction

Course Number	Title	Units
GEOL B1a	Physical Geology	4.0
ECON B2	Principles of Economics-Macro	3.0
BSAD B18a	Business Law	3.0
GEOG B1	Introduction to Geography: Physical Elements	3.0

City & Regional Planning

Course Number	Title	Units
COMS B12	Introduction to Programming with BASIC	3.0
GEOG B1	Introduction to Geography: Physical Elements	3.0
ECON B1	Principles of Economics-Micro	3.0
ECON B2	Principles of Economics-Macro	3.0
PHYS B2a or BIOL B11	General Physics-Mechanics & Heat Concepts of Biology	4.0
MATH B22	Elementary Probability & Statistics	5.0
GEOL B1a	Physical Geology	4.0

Landscape Architecture

Course Number	Title	Units
BIOL B3a	General Biology I	5.0
SOIL B1	Introduction to Soil Science	3.0
COMS 12	Introduction to Programming with BASIC (Elective)	3.0
ECON B2	Principles of Economics-Macro	3.0
PHYS B2a	General Physics-Mechanics & Heat	4.0
GEOG B1	Introduction to Geography: Physical Elements	3.0

Pre-Architecture: Those students entering Bakersfield College who have not completed three years of math and are not ready to enter MATH B1 (Math Analysis) should plan on spending at least three years at Bakersfield College to complete the lower division requirements for the architecture major at Cal Poly, S.L.O. and an additional three and one-half to four years at Cal Poly, S.L.O.

Pre-Architecture

Recommended 3-year program for those students who are entering college behind in their math, English, and/or GE requirements

California State Polytechnic University, S.L.O.

First Semester

Course Number	Title	Units
ARCH B1	Introduction to Architecture & Environmental Design	1.5
ARCH B11	Introduction to Drawing, Perspective & Graphics	4.0
INDR B11	Introduction to Computer Aided Drafting & Design (CAD)	1.0
MATH BD	Intermediate Algebra	4.0

Second Semester

Course Number	Title	Units
ARCH B6	Materials of Construction	3.0
ARCH B12	Basic Graphics, Analysis & Communication Skills	4.0
INDR B20a	Computer Aided Drafting & Design (CAD) (elective)	3.0
MATH BB	Geometry	3.0

Third Semester

Course Number	Title	Units
ARCH B31	Architectural Practice	3.0
ARCH B32	Architectural Computer Graphics	1.0
MATH BC	Plane Trigonometry	3.0

Fourth Semester

Course Number	Title	Units
ARCH B33	Architectural Computer Practice	3.0
MATH B1	Mathematical Analysis	4.0

Fifth Semester

Course Number	Title	Units
ARCH B21	Architectural Design Fundamentals I	4.0
MATH B6a	Analytic Geometry & Calculus I	4.0
PHYS B2a	General Physics - Mechanics and Heat	4.0

Sixth Semester

Course Number	Title	Units
ARCH B22	Architectural Design Fundamentals II	4.0
MATH B6b	Analytic Geometry & Calculus II	4.0
PHYS B4a or PHYS B2b	Mechanics & Wave Motion General Physics - Sound, Light, Electricity, Magnetism, Modern Physics	4.0

Cal Poly, Pomona

California State Polytechnic University, Pomona offers three undergraduate majors leading to the Bachelor of Science Degree in Architecture, Landscape Architecture, and Urban Planning. The student while attending Bakersfield College should plan on taking the same basic Architecture program as for Cal Poly, San Luis Obispo, but substituting MATH BC (Trig) for MATH B6a and PHYS B2a for PHYS B4a. Entry to Cal Poly, Pomona is based on a strong G.P.A., the above Math and Physics courses, English B1a and B1b, and English B2 and as many architecture courses as possible. A portfolio will be required for advanced placement into the architecture program. A Master's Degree is available in all three areas of study.

UC Berkeley

Students planning to transfer to the University of California, Berkeley should expect to take the following recommended courses. Berkeley has a 4-year curriculum leading to the A.B. Degree in the College of Environmental Design, with majors in Architecture 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

Course Number	Title	Units
ARCH B1	Introduction to Architecture & Environmental Design	1.5
ARCH B11	Introduction to Drawing, Perspective & Graphics	4.0
ARCH B12	Basic Graphics, Analysis & Communication Skills	4.0
ARCH B21	Architectural Design Fundamentals I	4.0
ARCH B22	Architectural Design Fundamentals II	4.0
MATH B6a	Analytic Geometry & Calculus I	4.0
MATH B6b	Analytic Geometry & Calculus II	4.0
PHYS B4a	Mechanics & Wave Motion	4.0
PHYS B4b	Heat, Electricity, & Magnetism	4.0

PRIVATE UNIVERSITIES/COLLEGES

The following list are those private universities/colleges offering degrees in architecture within the State of California.

- California College of Arts and Crafts-San Francisco
- New School of Architecture-San Diego
- Southern California Institute of Architecture-Santa Monica
- University of Southern California-Los Angeles
- Woodbury University-Burbank

Students interested in one of the above programs offered at these campuses should consult with the individual dean of the college they are interested in as to entry requirements. UC Los Angeles offers a graduate degree only.

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 B2a-B2b or B4a-B4c) and Chemistry (Chemistry B1a-B1b, B2a or B11) are designed to provide a foundation and understanding of the laws and principles of the physical world (matter and energy). These courses should be completed early in a student's academic program to insure greater success in subsequent courses.

Required Courses: 34 units

Course Number	Title	Units
CHEM B1a	General Chemistry	5.0
CHEM B1b	General Chemistry & Chemical Analysis	5.0
MATH B6a	Analytic Geometry & Calculus I	4.0
MATH B6b	Analytic Geometry & Calculus II	4.0
MATH B6c	Calculus III	4.0
PHYS B4a	Mechanics & Wave Motion	4.0
PHYS B4b	Heat, Electricity, & Magnetism	4.0
PHYS B4c	Optics & Modern Physics	4.0

Recommended Courses

Course Number	Title	Units
MATH B6d	Ordinary Differential Equations	3.0
COMS B12	Introduction to Programming with BASIC	3.0
COMS B11	Introduction to Programming with Pascal	3.0

Engineering

University of California, California State University and Private Universities

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.

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.

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. The programs which follow will help the student plan an appropriate program.

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 engineering core curriculum is the basis for Transfer Admission Agreements between Bakersfield College and the engineering colleges at several universities including the University of California at Davis and Rensselaer Polytechnic Institute in Troy, New York. The following Bakersfield College courses are required to completely satisfy the engineering core program:

Course Number	Title	Units
MATH B6a	Analytic Geometry & Calculus I	4.0
MATH B6b	Analytic Geometry & Calculus II	4.0
MATH B6c	Calculus III	4.0
MATH B6d	Ordinary Differential Equations	3.0
CHEM B1a	General Chemistry	5.0
ENGL B1a	Expository Composition	4.0
PHYS B4a	Mechanics & Wave Motion	4.0
PHYS B4b	Heat, Electricity, & Magnetism	4.0
PHYS B4c	Optics & Modern Physics	4.0
ENGR B17	Introduction to Electric Circuits	3.0
ENGR B24	Engineering Graphics & Descriptive Geometry	2.0
ENGR B36	Engineering Mechanics-Statics	3.0
ENGR B45	Properties of Materials	3.0
ENGR B48	Engineering Orientation	1.0
ENGR B19fc	Computer Programming for Science, Engineering & Technology	3-3.0

The following technical electives are highly recommended for all branches of engineering:

Course Number	Title	Units
MATH B6e	Elementary Linear Algebra	3.0
ENGR B49	Engineering Analysis & Design	1.0
INDR B10	Introduction to Industrial Drawing & Graphics	1.0
INDR B11	Introduction to Computer Aided Drafting & Design (CAD)	1.0
CHEM B1b	General Chemistry & Chemical Analysis	5.0
ENGR B37	Engineering Mechanics - Dynamics	3.0

The following technical electives are recommended for the particular branches listed:

GEOL B1a	Physical Geology-geological petroleum
APRD B1a	Beginning Machine Shop (manufacturing, industrial)

APRD B55	Introduction to Numerical Control & Fundamentals of Programming-manufacturing, industrial
WELD B1a	Introduction to the Welding Processes-manufacturing, industrial

Four-year colleges and universities neither require, nor recommend, that engineering majors complete lower division general education requirements prior to transfer. For students transferring to campuses of the University of California or to California Polytechnic University, San Luis Obispo, the following courses are recommended if they can be included in the student’s schedule:

Course Number	Title
SPCH B1	Speech Communication
PHIL B9	Critical Thinking and Composition

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 BC and MATH B1 at Bakersfield College
- b. one year of high school mechanical drawing or INDR B10 at Bakersfield College
- c. one year of high school chemistry or CHEM B2a at Bakersfield College
- d. eligibility for ENGL B1a

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.

First Semester

Course Number	Title	Units
MATH B6a	Analytic Geometry & Calculus I	4.0
CHEM B1a	General Chemistry	5.0
ENGR B48	Engineering Orientation	1.0
ENGR B49	Engineering Analysis & Design	1.0
ENGR B19fc	Computer Programming for Science, Engineering & Technology	3-3.0
INDR B10	Introduction to Industrial Drawing & Graphics	1.0
INDR B11	Introduction to Computer Aided Drafting & Design (CAD)	1.0

Second Semester

Course Number	Title	Units
MATH B6b	Analytic Geometry & Calculus II	4.0
CHEM B1b or	General Chemistry & Chemical Analysis	5.0
PHYS B4a	Mechanics & Wave Motion	4.0
ENGR B24	Engineering Graphics & Descriptive Geometry	2.0
ENGL B1a	Expository Composition	4.0

Third Semester

Course Number	Title	Units
MATH B6c	Calculus III	4.0
PHYS B4b	Heat, Electricity, & Magnetism	4.0
ENGR B45	Properties of Materials	3.0
ENGL B1a	Expository Composition	4.0
ENGR B36	Engineering Mechanics - Statics	3.0

Fourth Semester

Course Number	Title	Units
MATH B6d	Ordinary Differential Equations	3.0
PHYS B4c	Optics & Modern Physics	4.0
ENGR B17	Introduction to Electric Circuits	3.0
	Technical Elective or General Education	3-5.0

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 BD at Bakersfield College and eligibility for ENGL B1. 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.

First Semester

Course Number	Title	Units
MATH BC	Plane Trigonometry	3.0
ENGL B1	Introductory Composition	3-4.0
INDR B10	Introduction to Industrial Drawing & Graphics	1.0
ENGR B48	Engineering Orientation	1.0
INDR B11	Introduction to Computer Aided Drafting & Design (CADD)	1.0

Second Semester

Course Number	Title	Units
MATH B1	Mathematical Analysis	4.0
CHEM B2a	Introductory General Chemistry	5.0
ENGR B24	Engineering Graphics & Descriptive Geometry	2.0

Third Semester

Course Number	Title	Units
MATH B6a	Analytic Geometry & Calculus I	4.0
CHEM B1a	General Chemistry	5.0
ENGR B49	Engineering Analysis & Design	1.0
ENGR B19fpc	Computer Programming for Science, Engineering & Technology	3-3-3.

Fourth Semester

Course Number	Title	Units
MATH B6b	Analytic Geometry & Calculus II	4.0
CHEM B1b or	General Chemistry & Chemical Analysis	5.0
CHEM B3	General Chemistry & Chemical Analysis for Engineers	3.0
PHYS B4a	Mechanics & Wave Motion	4.0

Note: CHEM B1b or CHEM B3 should be taken depending on major.

Fifth Semester

Course Number	Title	Units
MATH B6c	Calculus III	4.0
PHYS B4b	Heat, Electricity, & Magnetism	4.0
ENGR B45	Properties of Materials	3.0
ENGL B1a	Expository Composition	4.0

Sixth Semester

Course Number	Title	Units
MATH B6d	Ordinary Differential Equations	3.0
PHYS B4c	Optics & Modern Physics	4.0
ENGR B36	Engineering Mechanics-Statics	3.0
ENGR B17	Introduction to Electric Circuits	3.0
MATH B6e	Elementary Linear Algebra	3.0

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

Course Number	Title	Units
GEOL B1a	Physical Geology	4.0
CHEM B1a	General Chemistry	5.0
CHEM B1b	General Chemistry & Chemical Analysis	5.0
MATH B6a	Analytic Geometry & Calculus I	4.0
MATH B6b	Analytic Geometry & Calculus II	4.0
PHYS B2a	General Physics-Mechanics & Heat	4.0
PHYS B2b	General Physics-Sound, Light, Electricity, Magnetism, Modern Physics	4.0
BIOL B3a	General Biology I	5.0
BIOL B3b	General Biology II	5.0

San Diego State University

Course Number	Title	Units
GEOL B1a or	Physical Geology	4.0
GEOL B10	Introduction to Geology	3.0
GEOL B10L	Introductory Geology Laboratory	1.0
GEOL B1b	Historical Geology	4.0
CHEM B1a	General Chemistry	5.0
CHEM B1b	General Chemistry & Chemical Analysis	5.0
BIOL B11	Concepts of Biology	4.0
MATH B6a	Analytic Geometry & Calculus I	4.0

Recommended Courses

Course Number	Title	Units
INDR B10	Introduction to Industrial Drawing & Graphics	1.0
MATH B6b	Analytic Geometry & Calculus II	4.0

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 B2a-B2b or B4a-B4c) and Chemistry (Chemistry B1a-B1b, B2a or B11) are designed to provide a foundation and understanding of the laws and principles of the physical world (matter and energy). These courses should be completed early in a student's academic program to insure greater success in subsequent courses.

Course Number	Title	Units
PHYS B4a	Mechanics & Wave Motion	4.0
PHYS B4b	Heat, Electricity, & Magnetism	4.0
PHYS B4c	Optics & Modern Physics	4.0
CHEM B1a	General Chemistry	5.0
CHEM B1b	General Chemistry & Chemical Analysis	5.0
MATH B6a	Analytic Geometry & Calculus I	4.0
MATH B6b	Analytic Geometry & Calculus II	4.0
MATH B6c	Calculus III	4.0
MATH B6d	Ordinary Differential Equations	3.0
COMS B11	Introduction to Programming with Pascal	3.0

Recommended Courses

Course Number	Title	Units
BIOL B3a	General Biology I	5.0
BIOL B11	Concepts of Biology	4.0

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

ARCHITECTURE

ARCH B1 Introduction to Architecture and Environmental Design (1.5 units)

Familiarization with the professional fields of architecture, landscape architecture, structural engineering, construction and city/regional planning. Introduction to schools of architecture programs as they relate to individual aptitudes. The design process. Guest speakers. Satisfies 0.5 unit counseling requirement for graduation from B.C. **Hours:** (27) 1.5 lect. Field trips required. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ARCH B6 Materials of Construction (3 units)

Use and application of construction processes and materials. **Recommended:** Reading Level 5 or 6. **Hours:** (90) 2 lect, 3 lab. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ARCH B11 Introduction to Drawing, Perspective and Graphics (4 units)

Basic techniques used in graphic communications for the environmental design fields including orthographic projection, pictorials, perspectives, shades and shadows. Exercises to develop basic skills and speed in the representation of ideas. **Hours:** (126) 3 lect, 4 lab. **Offered:** F. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

ARCH B12 Basic Graphics, Analysis and Communication Skills (4 units)

Drawing as a communication tool in the environmental design fields with further development of freehand graphic communication skills for representation of conceptual ideas analysis, and design concepts. Demonstrates the link between graphics, design process and communications. **Prerequisites:** ARCH B11. **Hours:** (144) 2 lect, 6 lab. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

ARCH B21 Architectural Design Fundamentals I (4 units)

Theories, principles, methods and means pertaining to the creation of two- and three-dimensional visual organizations to communicate intended concepts and meanings. **Prerequisite:** ARCH B1, B11, B12. **Hours:** (144) 2 lect, 6 lab. Field trips required. **Offered:** F. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

ARCH B22 Architectural Design Fundamentals II (4 units)

Continuation of the content and issues introduced in ARCH B21 plus the theories, principles, methods and means pertaining to the creation of architectural forms, space and organizations and incorporation of function and light as issues that shape the built environment and support the communication of intended concepts and meanings. **Prerequisite:** ARCH

B21. **Hours:** (144) 2 lect, 6 lab. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

ARCH B31 Architectural Practice (3 units)

Wood construction methods and processes. Construction documents used as communication medium for such methods and processes. **Prerequisites:** ARCH B6. **Recommended:** ARCH B11. **Hours:** (108) 2 lect, 4 lab. Field trips required. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ARCH B32 Architectural Computer Graphics (1 unit)

Introduction to the application of computers in architecture, including operating systems, applications and graphic systems as they relate to construction documents and design technology. **Prerequisites:** INDR B11, ARCH B31 (ARCH B31 may be taken concurrently). **Hours:** (54) 1 lect, 2 lab. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ARCH B33 Architectural Computer Practice (3 units)

The use of computer applications as a communication instrument in the design development and construction document phases of a light commercial project. Theory and application of laws and codes as they affect such buildings. **Prerequisite:** ARCH B32. **Hours:** (108) 2 lect, 4 lab. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ARCH B55 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. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

ARCH B56 Building and Related Codes (3 units)

Study of the uniform building, plumbing, mechanical and electrical codes. A companion course to ARCH B55 offering a greater in-depth study of the various codes which make up the Code of Building Regulations. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

ASTRONOMY

ASTR B1 Elementary Astronomy (3 units)

Introductory course emphasizing the fundamental observations and the underlying physical principles in scientific models of astronomy. Among topics included: the motions, properties, and evolution of the sun, planets, stars, galaxies, and universe; the properties of electromagnetic radiation; atomic structure; and astronomical instruments. **Prerequisite:** Reading Level 5 or 6. **Recommended:** Math BA with a

grade of "C" or equivalent. **Hours:** (54) 3 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

CHEMISTRY

Credit limitations may apply. For specific information see a counselor or the transfer institution.

The introductory courses in Chemistry (Chemistry B1a-B1b, Physics (Physics B2a-B2b or B4a-B4c) 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 B1a General Chemistry (5 units)

Basic principles of chemistry, including atomic structure, stoichiometry, reaction energy, chemical bonding, periodic relationships of the elements, states and properties of matter, solutions, introduction to acids and bases, a brief introduction to descriptive chemistry of the elements, and other topics as appropriate. The laboratory emphasizes quantitative methods. **Prerequisite:** Reading Level 5 or 6; CHEM B2a with a grade of "C" or higher or high school chemistry; MATH BD with a "C" or higher or 2 years of high school algebra. **Recommended:** Math prerequisite accomplished within previous 2 years. **Hours:** (162) 3 lect, 5 lab, 1 disc. **Offered:** F,S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN CHEM 2) (CHEM B1a + B1b = CAN CHEM SEQ A)

CHEM B1b General Chemistry and Chemical Analysis (5 units)

Continuation of CHEM B1a. Includes kinetics; equilibrium; thermodynamics; equilibrium as it applies to acid-base, solubility, and electrochemistry; nuclear chemistry; coordination chemistry; the descriptive chemistry of selected elements; and an introduction to organic chemistry. The laboratory includes qualitative analysis, quantitative techniques, and descriptive experiments. **Prerequisite:** CHEM B1a with a grade of "C" or better. **Hours:** (162) 3 lect, 5 lab, 1 disc. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN CHEM 4) (CHEM B1a + B1b = CAN CHEM SEQ A)

CHEM B2a 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 BA with a grade of "C" or equivalent and Reading Level 5 or 6. **Recommended:** Math prerequisite accomplished within previous 2 years. **Hours:** (162) 3 lect, 4 lab, 2 disc. **Offered:** F, S. **CCS:** Liberal Arts &

Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students with credit in CHEM B1a. (CAN CHEM 6)

CHEM B3 General Chemistry and Chemical Analysis for Engineers (3 units)

Continuation of CHEM B1a, primarily for engineering majors. Includes kinetics; general and ionic equilibrium; thermodynamics; solubility; electrochemistry; nuclear chemistry; metallurgy; descriptive chemistry of silicon, ceramics, organic compounds and polymers. The laboratory includes qualitative analysis, quantitative techniques, and descriptive experiments. **Prerequisite:** CHEM B1a with a grade of "C" or better. **Hours:** (90) 2 lect, 2 lab, 1 disc. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges.

CHEM B8 Elementary Organic Chemistry (3 units)

A survey of organic compounds, including the fundamental organic functional groups, 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, or students requiring only one semester of organic chemistry to complete chemistry requirements. **Prerequisites:** CHEM B1a or CHEM B2a with a minimum grade of "B." Concurrent enrollment in CHEM B9 required. **Hours:** (54) 3 lect. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

CHEM B9 Organic Chemistry Laboratory (3 units)

Covers fundamental laboratory techniques in organic chemistry including synthesis, separations, and instrumental analysis. Emphasizes handling of small sample sizes. **Prerequisite:** Concurrent enrollment in CHEM B8. (Note: Students who have taken CHEM B8 prior to 1987 may enroll.) **Hours:** (108) 5 lab, 1 disc. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

CHEM B15 Principles of Inorganic Chemistry (4 units)

Designed for ADN nursing and allied-health majors. Basic principles of inorganic chemistry including measurements; unit conversions; atomic theory; periodic properties; bonding; inorganic nomenclature; chemical equations; stoichiometry; nuclear chemistry; gas laws; states of matter; solutions; acids, bases, and buffers. **Prerequisite:** MATH BA with a grade of "C" or better or high school algebra; MATH prerequisite accomplished within the previous 2 years; Reading Level 5 or 6. **Hours:** (144) 2 lect, 4 lab, 2 disc. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges.

CHEM B16 Principles of Organic Chemistry and Biochemistry (3 units)

Designed for associate degree nursing and allied-health majors. Basic principles of organic chemistry, including nomenclature, and chemical and physical properties of the

major functional groups. Basic principles of biochemistry including carbohydrates, lipids, proteins, enzymes, nucleic acids and metabolism. **Prerequisite:** CHEM B15 or CHEM B2a with a grade of "C" or better. **Hours:** (90) 2 lect, 2 lab, 1 disc. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges.

CHEM B49 Applied Chemistry (4 units)

The systematic study of the principles of applied inorganic, organic, and biochemistry using a qualitative and quantitative approach. Topics include physical principles of chemistry; inorganic compounds and reactions; basic and applied nuclear chemistry, (including radioactivity, nuclear energy, uses of radioisotopes, radiation hazards); a survey of organic chemistry (classification, compounds, reactions, nomenclature); biochemistry (classification, composition, reactions in living organisms). The course emphasizes technical aspects of chemistry relating to everyday processes and industrial and environmental applications. **Prerequisite:** MATH BA or equivalent. **Recommended:** Reading Level 5 or 6. **Hours:** (108) 3 lect, 1 disc, 2 lab. Field trips may be required. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. **Note:** Not open to students with credit in ENVT B49.

ENGINEERING

Credit limitations may apply. For specific information see a counselor or the transfer institution.

ENGR B17 Introduction to Electric Circuits (3 units)

Principles and techniques of D.C. and A.C. circuit analysis, including Kirchoff's laws, mesh and nodal analysis, Thevenin's and Norton's theorems, impedance, phasors, frequency response, power calculations, natural and forced responses, analog building blocks, operational amplifiers, and Laplace transform. **Prerequisites:** PHYS B4b. **Recommended:** MATH B6d (may be taken concurrently). **Hours:** (72) 3 lect, 1 disc. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN ENGR 12)

ENGR B19f/B19c Computer Programming for Science, Engineering and Technology (3-3 units)

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. ENGR B19f uses the Fortran language, while ENGR B19c utilizes the C programming language. **Prerequisite:** MATH B6a (may be taken concurrently). **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F,S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ENGR B24 Engineering Graphics and Descriptive Geometry (2 units)

Orthographic projection, auxiliary views, sectioning, threads and fasteners, dimensioning, tolerance, and working drawing.

Descriptive geometry used to obtain points, lines, planes, intersections, developments and spatial relationships. Instrument and computer aided drafting systems used as aid to visualization and design. **Prerequisites:** INDR B10, INDR B11 and MATH BC or higher. **Recommended:** Reading Level 5 or 6. **Hours:** (72) 1 lect, 3 lab. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN ENGR 2)

ENGR B36 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. **Prerequisites:** PHYS B4a, MATH B6a. **Hours:** (54) 3 lect. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN ENGR 8)

ENGR B37 Engineering Mechanics-Dynamics (3 units)

Fundamental principles of motions of particles and rigid bodies and their application to engineering problems. Velocity, acceleration, relative motion, work, energy, impulse, and momentum. Mathematical modeling and analysis of mechanical systems. Vector mathematics will be used as appropriate. **Prerequisites:** ENGR B36 and MATH B6c. **Hours:** (54) 3 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and Private Colleges.

ENGR B45 Properties of Materials (3 units)

Internal structure of engineering materials. Characteristics of single and multiple phase metals; polymers, ceramics and composite materials. Mechanical, thermal, chemical and electrical behavior of engineering materials. Laboratory investigation of the physical properties of metals, wood, soils, concrete, and polymers. **Prerequisites:** MATH BC and CHEM B1a and PHYS B4a OR MATH BC and CHEM B2a and PHYS B2a. **Hours:** (90) 2 lect, 3 lab. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN ENGR 4)

ENGR B48 Engineering Orientation (1 unit)

Survey of engineering as a profession. All branches discussed with respect to career opportunities, educational requirements, development of a personal education plan. Satisfies 0.5 unit educational planning requirement for graduation from Bakersfield College. **Recommended:** MATH BA, Reading Level 5 or 6. **Hours:** (18) 2 lect for 9 weeks. Field trips required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

ENGR B49 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:** MATH B6a (may be taken concurrently). **Recommended:** ENGR B48, Reading Level 5

or 6. **Hours:** (18) 2 lect for 9 weeks. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

GEOGRAPHY

GEOG B1 Physical Elements of Geography (3 units)

A study of the basic elements of physical geography; climate, land forms, soils, natural vegetation and their patterns of world distribution. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN GEOG 2)

GEOG B1L Physical Geography Laboratory (1 unit)

Laboratory assignments designed to accompany GEOG B1 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. **Recommended:** Reading Level 5 or 6, GEOG B1 (may be taken concurrently). **Hours:** (54) 2 lab, 1 quiz/demo. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

GEOG B2 Human Geography (3 units)

Introduction to concepts and tools of human geography including origin of cultural landscapes, human modification of natural environments and spatial distribution of population, languages, religions, agriculture, urbanization and industrialization, and political systems. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges.

GEOLOGY

Credit limitations may apply. For specific information see a counselor or the transfer institution.

GEOG B1a 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 5 or 6. **Hours:** (108) 3 lect, 3 lab. At least 1 Saturday field trip or equivalent required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, GEOL B10 and B10L.

GEOG B10 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 substi-

tute GEOL B1a or enroll in GEOL B10L concurrently with GEOL B10. **Prerequisite:** Reading Level 5 or 6. **Hours:** (54) 3 lect. At least one Saturday field trip or equivalent required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken GEOL B1a.

GEOL B10L Introductory Geology Laboratory (1 unit)

Exercises planned to accompany the lectures of GEOL B10. 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. **Recommended:** Reading Level 5 or 6, concurrent enrollment in GEOL B10. **Hours:** (54) 3 lab. Field trip required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

GEOL B12 Geology of California (3 units)

An elementary course dealing with the geologic history, structure, topography and mineral resources of California and adjoining areas. **Prerequisites:** GEOL B1a or GEOL B10. **Hours:** (54) 3 lect. One field trip or equivalent required. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

GEOL B35a Rocks and Minerals (1 unit)

A study of rocks and minerals. Students will learn to identify the major rock-forming minerals and to recognize their relationships as components of the various classes of rocks. From the identification of rocks, recognition of the environmental conditions of deposition will follow. Field work will allow the examination of the field relationships of various rocks and the beginning of a collection of rock and mineral specimens. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 9 lect/lab for 2 weeks. Field trip required. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

GEOL B35b Geology of Kern County (1 unit)

A study of the geologic history and landforms of Kern County, and the geologic forces and processes that created them. As part of this course, students will learn about many of the different rocks and minerals of Kern County, tectonic activity and mountain building, volcanic activity, earthquakes and weathering. From materials presented, students will be able to understand the geologic forces that shaped Kern County. A field trip is required which will permit the examination and recognition of different geological environments. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 9 lect for 2 weeks. Field trip required. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

PHYSICAL SCIENCE

Credit limitations may apply. For specific information see a counselor or the transfer institution.

PHSC B11 General Physical Science (4 units)

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. Designed for all non-science, industrial technology and education majors. **Recommended:** Reading Level 5 or 6. **Hours:** (108) 3 lect/demo/disc, 3 lab. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

PHSC B35e Cup and Saucer Chemistry (1 unit)

An inexpensive approach to studying chemical happenings. Emphasizes a "hands on" approach to doing and developing experience in chemistry that leads to an understanding of investigation, Metric, particle nature of matter, energy and the shape of things. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 9 lect/disc for 2 weeks. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

PHSC B248ab Cooperative Work Experience Education (1-8 units. Limit 16 units)

See WEXP 248ab description.

PHSC B249ab Cooperative Work Experience Education (1-4 units. Limit 16 units)

See WEXP 249ab description.

PHYSICS

Credit limitations may apply. For specific information see a counselor or the transfer institution.

The introductory courses in Physics (Physics B2a-B2b or B4a-4c) and Chemistry (Chemistry B11, B2a or B1a-B1b) 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.

PHYS B2a 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 BD, MATH BC (may be taken concurrently). **Recommended:** Reading Level 5 or 6. **Hours:** (126) 4 lect, 3 lab. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN PHYS 2) (PHYS B2a + B2b = CAN PHYS SEQ A)

PHYS B2b 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: MATH BC and MATH BD and either PHYS B2a or high school physics with a “C”. **Hours:** (126) 4 lect, 3 lab. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN PHYS 4) (PHYS B2a + B2b = CAN PHYS SEQ A)

PHYS B4a 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. **Prerequisite:** MATH B6a. **Recommended:** Reading Level 5 or 6. **Hours:** (126) 3 lect, 1 disc, 3 lab. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN PHYS 8) (PHYS B4a + B4b + B4c = CAN PHYS SEQ B)

PHYS B4b Heat, Electricity and Magnetism (4 units)

The second in a three-semester calculus-based physics sequence required of physics, engineering, and other majors requiring a thorough physics background. Includes thermodynamics, electricity, magnetism, and electromagnetic oscillations and radiation. Emphasizes principles, laws and problem-solving. **Prerequisite:** PHYS B4a and concurrent enrollment in MATH B6c. **Hours:** (126) 3 lect, 1 disc, 3 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. (CAN PHYS 12) (PHYS B4a + B4b + B4c = CAN PHYS SEQ B)

PHYS B4c Optics and Modern Physics (4 units)

The third in a 3-semester calculus-based physics sequence required of physics, engineering and other majors requiring a thorough physics background. Includes geometric optics, relativity, quantum physics, quantum mechanics, atomic and molecular physics, solid state physics, and nuclear physics. Emphasizes principles, laws, and problem solving. **Prerequisite:** PHYS B4b. **Recommended:** Concurrent enrollment in MATH B6d. **Hours:** (126) 3 lect, 3 lab, 2 disc. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. (CAN PHYS 14) (PHYS B4a + B4b + B4c = CAN PHYS SEQ B)



Senior Studies

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

SENR B90 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. For senior citizens and for other adults interested in senior programs. **Hours:** (18-108) 1-6 lect/demo or activity. **CCS:** Community Education - Community & Civic Development. **Not Transferable:** Not degree applicable.

SENR B97 Safety and Security for Seniors (0 units)

Curriculum adapted or designed to meet the needs, interests, and capabilities of senior citizens who seek instruction without college credit, examinations or grades. Topics on safety and security presented as workshops, lectures and lectures series, six to eighteen week discussion/lecture/demonstration classes, and computer-assisted classes. **Hours:** (2-108) 1-6 lect/lab or activity. **CCS:** Community Education-Community & Civic Development. **Not Transferable:** Not Degree Applicable.

SENR B98 Self Management for Seniors (0 units)

Curriculum adapted or designed to meet the needs, interests, and capabilities of senior citizens who seek instruction without college credit, examinations or grades. Topics on self management presented as workshops, lectures and lecture series, six to eighteen week discussion/lecture/demonstration classes, and computer-assisted classes. **Hours:** (2-108) 1-6 lect/lab or activity. **CCS:** Community Education-Community & Civic Development. **Not Transferable:** Not Degree Applicable.



Social Science

Economics

History

Political Science

This program is designed for students who wish to major in Economics, History, or Political Science for an Associate Degree and/or transfer to a four-year college or university. These majors provide training in the fundamental skills for careers in business, law, journalism, politics, international business, foreign service, government, and education.

For the 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 in Arts 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 to insure the transferability of the courses.

ASSOCIATE IN ARTS DEGREE PROGRAM

Economics

The major in economics is designed for students interested in preparing for advanced degrees in Economics, Business, Law and for those students concerned with the economic behavior of consumers, businesses, and governments. Economics majors have a wide variety of career opportunities in business, law, journalism, education, politics, finance and banking, government, public and private overseas service, and labor leadership. Many economics majors go on to pursue graduate study in a related professional area, such as law, business, or public administration.

Required Courses: 18 units

Course Number	Title	Units
ECON B1	Principles of Economics-Micro	3.0
ECON B2	Principles of Economics-Macro	3.0
MATH B2	Basic Functions and Calculus for Business	4.0
MATH B22	Elementary Probability and Statistics	5.0
PSYC B6 or COMS B2	Introduction to Behavioral Science Research Introduction to Computer Information Systems	3.0

Electives

Course Number	Title	Units
ENGL B1a	Expository Composition	4.0
PHIL B7	Introduction to Logic	3.0
HIST B17b	History of the U.S. Since 1877	3.0
POLS B1	American Government: National, State and local	3.0
PSYC B1a	General Psychology	3.0
BSAD B1a	Financial Accounting	4.0
BSAD B1b	Managerial Accounting	4.0
SPCH B1	Speech Communication	3.0
MATH B23	Finite Mathematics	3.0

History

The major in history is designed for students interested in gaining an understanding of our 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 education, law, business, government and journalism. While there are few entry level jobs specifically for students with an

Associate in Arts in History, many employers value the writing and thinking skills acquired by History majors.

Bakersfield College offers a wide variety of history courses in addition to those listed below. The student should select courses according to his/her area of specialization as well as the requirements of the college to which he/she plans to transfer. The student should also consult his/her counselor and the appropriate four-year college catalogs in determining an appropriate minor, foreign language requirements, and other requirements.

Required Courses: 18 units

Course Number	Title	Units
HIST B4ab	European Civilization	6.0

AND one of the following:

Course Number	Title	Units
HIST B17ab	History of the U.S.	6.0
HIST B20ab	African American History of the United States	6.0
HIST B30ab	Chicano History	6.0
HIST B2 and HIST B25	World History (3.0) Introduction to Women in American History (3.0)	6.0

AND any two of the following courses:

Course Number	Title	Units
ECON B2	Principles of Economics-Macro	3.0
HIST B18a	History of Early California	3.0
HIST B18b	Modern California	3.0
HIST B36	History of Native Americans	3.0
GEOG B1	Introduction to Geography: Physical Elements	3.0
POLS B1	American Government: National, State and local	3.0
POLS B2	Comparative Government	3.0
POLS B3	International Politics	3.0
SOCI B1	Introduction to Sociology	3.0
HIST B3	20 th Century History	3.0
HIST B33	Latin American History	3.0

Recommended Courses

Course Number	Title	Units
ART B30abcd	Art History	12.0
ENGL B2	Advanced Composition and Critical Thinking	5.0
PHIL B6a	Introduction to Philosophy	3.0
PSYC B1a	General Psychology	3.0
ANTH B2	Cultural Anthropology	3.0

Political Science

The majors in Political Science are designed for students interested in gaining an understanding of the structure and functions of governments. The majors are an important part of the liberal arts program and prepare students for further study and careers in education, law, business, government, international relations and journalism.

The student should select the major emphasis, and courses according to his/her area of specialization as well as the

requirements of the college to which he/she plans to transfer. The student should also consult his/her counselor and the appropriate four-year college catalogs in determining an appropriate minor, foreign language requirements, and other requirements.

Required Courses: 18 units

Course Number	Title	Units
POLS B1	American Government: National, State and local	3.0
POLS B2 or POLS B3	Comparative Government International Politics	3.0
POLS B12 or POLS B16	State and Local Government Vital Political Problems	3.0
HIST B4ab or HIST B17ab or HIST B20ab or HIST B30ab	European Civilization History of the U.S. African American History of the US Chicano History	6.0
ECON B2 or PSYC B5 or MATH B22	Principles of Economics-Macro Elementary Statistics for the Behavioral and Social Sciences (4.0) Elementary Probability and Statistics (5.0)	3.0

Political Science, emphasis in International Relations

Required Courses: 18 units

Course Number	Title	Units
POLS B1	American Government: National, State and local	3.0
POLS B2	Comparative Government	3.0
POLS B3	International Politics	3.0
HIST B4ab	European Civilization	6.0
ECON B2 or PSYC B5 or MATH B22	Principles of Economics-Macro Elementary Statistics for the Behavioral and Social Sciences (4.0) Elementary Probability and Statistics (5.0)	3.0

Political Science, emphasis in Domestic Policy

Required Courses: 18 units

Course Number	Title	Units
POLS B1	American Government: National, State and local	3.0
POLS B12	State and Local Government	3.0
POLS B16	Vital Political Problems	3.0
HIST B17ab	History of the U.S.	6.0
ECON B2 or PSYC B5 or MATH B22	Principles of Economics-Macro Elementary Statistics for the Behavioral and Social Sciences (4.0) Elementary Probability and Statistics (5.0)	3.0

Electives

Course Number	Title	Units
ENGL B2	Advanced Composition and Critical Thinking	5.0
HIST B18b	Modern California	3.0
PSYC B1a	General Psychology	3.0
SOCI B1	Introduction to Sociology	3.0
PSYC B6	Introduction to Behavioral Science Research	3.0

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

ECONOMICS

ECON B1 Principles of Economics-Micro (3 units)

Principles of economic analysis and decision making from the viewpoint of the individual consumer, worker, and firm. Emphasis on 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. **Recommended:** Eligibility for ENGL B1, Reading Level 5 or 6, MATH BA. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN ECON 4)

ECON B2 Principles of Economics-Macro (3 units)

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. **Recommended:** Eligibility for ENGL B1, Reading Level 5 or 6, MATH BA. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN ECON 2)

HISTORY

Credit limitations may apply. For specific information see a counselor or the transfer institution.

HIST B2 World History (3 units)

Interdisciplinary multimedia approach to the development of our interconnected and interdependent modern world since the 16th Century. Emphasis is on comparative history, world systems, modernization theory, cultural diffusion, and ecologies of core/periphery associations. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges.

HIST B3 20th Century History (3 units)

A comparative global history of the 20th century with a special emphasis on the rise of mass society and the role of technology in the modern world. Includes an in-depth

examination of historical evidence and interpretation.

Recommended: Reading Level 5 or 6. **Hours:** (54) 3 lect.

CCS: Liberal Arts and Sciences. **Transferable:** CSU and private colleges.

HIST B4a-B4b European Civilization (3-3 units)

Survey of the growth of western civilization from its origin to the present. Focuses on the integration of political, social, and cultural developments. **Recommended:** Reading Level 5 or 6. **Hours:** (54-54) 3 lect. **Offered:** B4a: F; B4b: S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (HIST B4a = CAN HIST 2)

HIST B17a-B17b History of the United States (3-3 units)

Survey of the political, economic and cultural history of the United States from earliest colonial times to the present. HIST B17a (to 1877) includes a study of the U.S. Constitution and Federal Government. HIST B17b (since 1877) includes a study of the state and local government of California. Satisfies the requirements in U.S. Constitution and American history and institutions. HIST B17a is not a prerequisite for HIST B17b. **Hours:** (54-54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (HIST B17a = CAN HIST 8; HIST B17b = CAN HIST 10)

HIST B18a 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 requirements in U.S. Constitution, American history and institutions. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

HIST B18b Modern California (3 units)

Historical environment of modern California. Emphasis on political, economic, social and cultural development. Satisfies the requirements in U.S. Constitution, American history and institutions. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

HIST B20a African American History of the United States (3 units)

Survey of the political, economic, and cultural history of the United States from earliest colonial times to reconstruction with emphasis on the role and contributions of African Americans. Includes a study of the U.S. Constitution and federal government. Satisfies the requirements in U.S. Constitution, and American history and institutions. **Recommended:** Eligibility for ENGL B1 and Reading Level 5 or 6. HIST B20a is not a prerequisite for HIST B20b. **Hours:** (54) 3 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

HIST B20b African American History of the United States (3 units)

Survey of the political, economic, and cultural history of the United States from reconstruction to the present with emphasis on the role and contributions of African Americans. Includes a study of the state and local government of California. Satisfies the requirements in U.S. Constitution and American history and institutions. **Recommended:** Eligibility for ENGL B1 and Reading Level 5 or 6. HIST B20a is not a prerequisite for HIST B20b. **Hours:** (54) 3 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

HIST B25 Introduction to Women in American History (3 units)

Survey of the history of women in America from 1620 to 1890. Emphasis on the social, regional, and multicultural distinctions in the role of American women. Includes women's relationships with California's state and local governments. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges.

HIST B30a Early Chicano History (3 units)

Survey of the history of the Mexican-American borderlands, from Pre-Columbian times until 1848. Includes the social economic, and political evolution of the region with emphasis on the interrelationships between the histories of the United States and Mexico. Satisfies the requirements in U.S. Constitution, American history, and institutions. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, CHST B30a.

HIST B30b History of Chicanos in the Southwest (3 units)

Survey of the Chicanos and the United States 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. Satisfies the requirements in U.S. Constitution, American history, and institutions. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, CHST B30b.

HIST B33 Latin American History (3 units)

Historical survey of the social, economic and political development of Latin America, including the formation of pre-Columbian civilizations through establishment of the Spanish Colonial system to nation building of the modern era. Examines the impact of the United States foreign policy on the development of Latin America. **Recommended:** Eligibility for ENGL B1. Reading Level 5 or 6. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges.

HIST B36 History of Native Americans (3 units)

Survey of the origins, traditions, lifeway and belief systems of the various Native Americans. Emphasis is on the encounter with Anglo American expansion and on the impact of the governmental policies on this indigenous people. **Hours:** (54) 3 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Offered only occasionally.

POLITICAL SCIENCE**POLS B1 American Government: National, State and local (3 units)**

A study of American government with emphasis on the national government. Includes a comprehensive analysis of governmental structure, functions, principles and problems. Includes analysis of California state and local governments. Satisfies the requirements in U.S. Constitution, American history and institutions and state and local government. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN GOVT 2)

POLS B2 Comparative Government (3 units)

A comparative analysis of government structures and the underlying economic, social, and cultural systems of the principal nations of the industrial world: United Kingdom, France, Federal Republic of Germany, Russia, and Japan. Additional emphasis on certain nations in sensitive geographic areas or countries whose size and developing economies make them important, such as the People's Republic of China, Brazil, Mexico, Israel, Egypt, India and Nigeria. **Hours:** (54) 3 lect. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

POLS B3 International Politics (3 units)

Surveys the dynamics and ideologies of present-day international politics and rivalries. Development of the national state system and the evolution of the techniques and arts of diplomacy, and the causes of war. **Hours:** (54) 3 lect. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

POLS B5 Current Issues in American Government (1-2 units. Limit 6 units)

Study of special current events, such as elections, impeachment proceedings, or Constitutional revisions. Offered only as such events occur. **Hours:** (18-36) 2 lect. **Repeat:** 3 or until a limit of 6 units is reached. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

POLS B6 Introduction to Behavioral and Social Science Research (3 units)

Emphasizes behavioral and social science research, including research design, data collection and analysis, and the development of basic computer skills. Students will collect and analyze data from experiments, questionnaires, polls and a

variety of methodologies. **Prerequisites:** PSYC B5 or MATH B22, introductory course in Psychology Sociology, Anthropology, Economics or Political Science. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent courses, PSYC B6 or BEHS B6.

POLS B12 Contemporary Issues in California State and Local Government (3 units)

Analysis of the role of state and local governments, with special emphasis directed to the history and development of these institutions; the state and local political systems; the political environment; party, interest group, citizen and media inputs; current problems and changing functions affecting local governments. **Hours:** (54) 3 lect. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

POLS B16 Vital Political Problems (3 units)

Examination of major political problems challenging the United States today. Emphasis on class discussion and individual analysis of controversial topics involving political policy in the context of the study of political science. **Hours:** (54) 3 lect. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

POLS B42ab Principles of Leadership: Theories, Styles and Realities (2-2 units)

Introduction to the dynamics of working groups and the impact of leadership on the effectiveness of groups; examination of the linkage between concepts and theories of leadership to the everyday functioning of student organizations; understanding of the role played by structure and governance models in organizational effectiveness. Specific instruction in the principles of administration of: the co-curricular activities; ASBC finances, including budgetary procedures and parliamentary procedures and group dynamics. One hour each week is devoted to a student body and/or business meeting and one hour to in-class instruction. Student officers serving their first term are required by ASBC By-Laws to enroll in this course. **Hours:** (36-36) 2 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges. **Note:** Elective credit only.

*Student
Development*

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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 (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

STUDENT DEVELOPMENT

STDV B1 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. Satisfies the 0.5 unit educational planning requirement for graduation from Bakersfield College. **Recommended:** Reading Level 5 or 6. **Hours:** (9) 9 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. Elective credit only. Note: Not open to students who have taken the equivalent course, STDV B201.

STDV B2 Career Decision Making and Educational Planning (1.5 units)

An introduction to career search and strategies. Provides an overview of the career decision-making process including goal setting, decision making and researching the job market. Educational plans, college policies and procedures, as well as the transfer process and Associate Degree and certificate requirements are covered. Satisfies the 0.5 unit educational planning requirement for graduation from Bakersfield College. **Recommended:** Reading Level 5 or 6. **Hours:** (27) 3 lect/disc for 9 weeks. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. Elective credit only.

STDV B3 Career Decision Making, Educational Planning, and Job Search Strategies (3 units)

Assists students in choosing a career, selecting a major, and developing an educational plan. Includes overview of the career decision making process, college policies and procedures, certificate, associate degree and transfer requirements. Also provides an introduction to job search strategies. Assessment and exercises enable students to become more aware of interests, values, and skills in order to set and achieve career and educational goals. Satisfies the 0.5 unit educational planning requirement for Bakersfield College. **Recommended:** Reading Level 5 or 6 and English Level 4. **Hours:** (54) 3 lect/disc. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. Elective credit only.

STDV B4 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 educational planning requirement for graduation from Bakersfield College. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 2 lect/disc for 9 weeks. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. Elective credit only.

STDV B6 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 adapt 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 educational planning requirement for graduation from Bakersfield College. **Recommended:** Reading Level 5 or 6. **Hours:** (40.5) 3 lect for 13.5 weeks. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. Elective credit only.

STDV B51 Job Search Strategies (1 unit)

Assisting students with job search skills. Guidance through the job search process including strategies for skills identification, marketing techniques, resume writing and cover letters, job search strategies, and interviewing skills. **Hours:** (18) 2 lect/disc for 9 weeks. **CCS:** Liberal Arts & Sciences. **Not Transferable:** Associate Degree only.

STDV B53 Single Parent Preparatory Education (3 units)

Prepares single parents for a return to education. Emphasis is on improving self-esteem, communication and basic and learning skills. **Recommended:** English Level 3 or evaluation by instructor. **Hours:** (135) 9 lect/disc for 15 weeks. **CCS:** Precollegiate- basic skills. **Not Transferable:** Not degree applicable.

STDV B55a Strategies for College Success (1 unit)

Strategies to assist students to be successful in their college careers. To enhance their probability of success, students will learn communication skills, stress reduction, self-esteem education, goal achievement, problem solving, and the ability to focus their energy and think positively about school.

Hours: (18) 1.5 lect/disc for 12 weeks. **Repeat:** 3. **Offered:** F, S. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

STDV B74m A Positive Attitude Towards Math (0.5 units)

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 left brain, and assists students in reducing their level of math anxiety. **Hours:** (9) 1 lect for 9 weeks. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

STDV B201 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. Satisfies the 0.5 unit educational planning requirement for graduation from Bakersfield College. **Recommended:** Reading Level 5 or 6.

Hours: (9) 9 hours arranged. Open entry/open exit. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. Elective credit only. Note: Not open to students who have taken the equivalent course, STDV B1.



*Theatre Arts
and
Dance*

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.

CERTIFICATE OF ACHIEVEMENT

Technical Theatre Certificate

Required Courses: 35 units

Course Number	Title	Units
THEA B1	Introduction to Acting	3.0
THEA B28	Technical Theatre Laboratory	12.0
THEA B249	Cooperative Work Experience Education	5.0
THEA B4 or THEA B5 or THEA B6 or THEA B9 or THEA B10	Introduction to Stagecraft Introduction to Scene Design Introduction to Stage Make-Up Introduction to Lighting and Sound Design Introduction to Stage Management and Technical Direction	3.0
SPST B201	Special Projects and Studies	3.0

Electives: at least 9 units of approved electives

**ASSOCIATE IN ARTS DEGREE PROGRAM
THEATRE ARTS**

Students must comply with the requirements as shown in the catalog under graduation requirements. Counselors/Advisors will assist the student in planning for an Associate Degree.

Required Courses: 18 units

Course Number	Title	Units
THEA B2ab	Elements of Acting	6.0
THEA B3a	Applied Acting Problems	2.0
THEA B3b	Applied Acting Problems	2.0
THEA B4	Introduction to Stagecraft	2.0
THEA B6	Introduction to Stage Make-up	3.0
THEA B27 or THEA B28	Acting Theatre Laboratory Technical Theatre Laboratory	1-3.0

Note: Theatre majors should enroll for at least one unit of THEA B27 or THEA B28 per semester.

Electives

Course Number	Title	Units
THEA B5	Introduction to Scene Design	3.0
THEA B12a	Introduction to Shakespeare	3.0
THEA B15	Stage Movement	3.0
THEA B20	A Survey of Theatre and the Roots Of Entertainment	3.0
THEA B31	Introduction to Film Studies	3.0
THEA B32	Contemporary Film Studies	3.0
THEA B35	Introduction to Theatre	1.0
ART B1	Art Appreciation	3.0
ART B2ab	Basic Drawing	3.0
ART B3ef	Fundamentals of Color I	3.0
WOOD B1	Beginning Hand Woodworking	3.0

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

DANCE

Credit limitations may apply. For specific information see a counselor or the transfer institution.

DANC B6bLb Beginning Ballet (1 unit)

Coeducational beginning ballet course, includes proper warm-up exercise, technical skills and terminology. **Hours:** (36) 2 participation. **Repeat:** 3. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students with credit in PHED B6bLb.

DANC B6jd Jazz Dance (1 unit)

Fundamental jazz dance techniques and fundamentals and terminology of ballet as they relate to jazz dance including warm-up exercises for the preparation of the human body as an instrument for dance. Different styles and rhythms of jazz dance and music for jazz dance will be introduced. **Hours:** (36) 2 lab. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students with credit in PHED B6jd.

DANC B6md Modern Dance (1 unit)

Modern dance as a lifelong physiological, psychological and social activity. A coeducational course in which the student will learn warm-ups, techniques, experience with movement improvisation and develop a knowledge of the elements of dance composition. **Hours:** (36) 2 participation. **Repeat:** 3. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students with credit in PHED B6md.

THEATRE ARTS

Credit limitations may apply. For specific information see a counselor or the transfer institution.

THEA B1 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, personal arts or in personal development. Recommended: Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

THEA B2ab Elements of Acting (3-3 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. Recommended: Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (THEA B2a = CAN DRAM 8)

THEA B3a-B3b-B3c-B3d Applied Acting Problems (2-2-2-2 units)

A study and application of the various theories of acting, utilizing a variety of improvisational and scripted exercises and performance pieces. Recommended: Reading Level 5 or 6. **Hours:** (72) 1 lect, 3 lab. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

THEA B4 Introduction to Stagecraft (3 units)

Basic set construction, scenic paint, scenic painting, stage properties, 3-D scenery, special effects, lighting and sound. Recommended: Concurrent enrollment in 1 unit of THEA B28, Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN DRAM 12)

THEA B5 Introduction to Scene Design (3 units)

General knowledge of set design functions and types of scene design. Emphasis is on drafting and painting equipment, techniques, elements of design, drafting a floor plan and model making. **Recommended:** Concurrent enrollment in 1 unit of THEA B28, Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

THEA B6 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. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. (CAN DRAM 14)

THEA B7 Introduction to Stage Costume (3 units)

Basic sewing techniques, pattern information, types of fabric, costume history and design. Practical approach through construction of costume pieces, costume renderings and participation on a wardrobe crew. **Recommended:** Reading Level 5 or 6. **Hours:** (108) 2 lect, 4 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges.

THEA B8 Musical Theatre (2 units)

A study of musical theatre. Covers 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. **Recommended:** Reading Level 5 or 6. **Hours:** (36) 2 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges.

THEA B9 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. **Recommended:** THEA B4 or evaluation by instructor, concurrent enrollment in 1 unit of THEA B28. **Hours:** (54) 3 lect/demo. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

THEA B10 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, construction, load-in; technical rehearsals and performances, load-out; and employment in industry. **Recommended:** THEA B1 or THEA B4 or evaluation by instructor, concurrent enrollment in 1 unit of THEA B28. **Hours:** (54) 3 lect. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

THEA B12a Introduction to Shakespeare (3 units)

Examination of Shakespeare's use of verse, scansion, imagery, developing style, and Theatre. Emphasis is on performance and reading of four representative plays. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **Repeat:** 3. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

THEA B15 Stage Movement (3 units)

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. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 1 lect. 2 lab. **Repeat:** 1. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges.

THEA B20 A Survey of Theatre and the Roots of Entertainment (3 units)

Designed for non-majors, this class introduces the student to the fundamental concepts and elements of theatre, drama and entertainment by exploring their origins, history, and functions in society as they are experienced and used by individuals. Much of the subject matter is introduced through entertaining in-class demonstrations and presentations. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges.

THEA B27 Acting Theatre Laboratory (1-3 units. Limit 12 units)

The rehearsal and production of both main stage and experimental theatre dramas. Theatre activity for the beginner or expert in acting. **Prerequisite:** Audition. **Recommended:** Reading Level 5 or 6. **Hours:** (60-180) 60 hours per unit. **Offered:** F, S. **Repeat:** 3 or until a limit of 12 units is reached in combination with THEA B227. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

THEA B28 Technical Theatre Laboratory (1-3 units. Limit 12 units)

Participation in set construction, lighting, make-up, costume, properties, or any other technical area of theatrical productions. **Recommended:** Reading Level 5 or 6. **Hours:** (54-162) 54 hours per unit. **Offered:** F, S. **Repeat:** 3 or until a limit of 12 units is reached in combination with THEA B228. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

THEA B30 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. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 3 lect for 6 weeks. **Repeat:** 3. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges. **Note:** Elective credit only.

THEA B31 Introduction to Film Studies (3 units)

Designed to heighten the awareness and appreciation of the student to cinema from its beginning to the present. The critical viewing and discussion of film will provide the basis for the development of aesthetic appreciation. **Recommended:** Reading Level 5 or 6. **Hours:** (54) 3 lect/disc. **Offered:** F. **Repeat:** 1. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

THEA B32 Contemporary Film Studies (3 units)

By viewing and discussing the films of a particular genre, such as the western or the comedy film, and then reading and writing about them, the student will develop an aesthetic appreciation of film genres. **Recommended:** Reading Level 5

or 6. **Hours:** (54) 3 lect. **Offered:** S. **Repeat:** 1. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

THEA B35 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. **Recommended:** Reading Level 5 or 6. **Hours:** (18) 3 lect for 6 weeks. **Repeat:** 3. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

THEA B52 Introduction to Sound Reinforcement and Recording (3 units)

Introduction to sound reinforcement and recording. Designed for the student who wants a general knowledge of sound equipment and applications. Covers basic acoustics, electronic principles of audio equipment, and reinforcement and recording equipment and techniques. **Recommended:** Reading Level 5 or 6, concurrent enrollment in THEA B28. **Hours:** (108) 6 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

THEA B54 Introduction to Scenic Art (3 units)

Introduction to scenic painting. Designed for the student who wants a general knowledge of scenic art. Covers basic techniques, materials, and equipment. **Recommended:** Reading Level 5 or 6, concurrent enrollment in THEA B28. **Hours:** (108) 6 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

THEA B227 Acting Theatre Laboratory (1-3 units. Limit 12 units)

The rehearsal and production of both main stage and experimental theatre dramas. Theatre activity for the beginning or expert in acting. **Prerequisite:** Audition **Recommended:** Reading Level 5 or 6. **Hours:** (60-180) 60 per unit. Open entry/open exit. **Offered:** F, S. **Repeat:** 3 or until a limit of 12 units is reached in combination with THEA B27. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

THEA B228 Technical Theatre Laboratory (1-3 units. Limit 12 units)

Participation in set construction, lighting, make-up, costume, properties, or any other technical area of production. **Recommended:** Reading Level 5 or 6. **Hours:** (60-180) 60 per unit. Open entry/open exit. **Offered:** F, S. **Repeat:** 3 or until a limit of 12 units is reached in combination with THEA B28. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

THEA B249ab Cooperative Work Experience Education (1-4 units. Limit 16 units)

See WEXP 249ab description.



*Work
Experience*

Cooperative Work Experience Education

Bakersfield College, in cooperation with business, industry, government 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 units per semester for part-time occupational work experience or three units per semester for general work experience under the Parallel Plan. Under the Alternate Plan, the college may grant to a student an amount of eight units per semester for full-time employment. Full-time and part-time summer work experience can also qualify for credit. Work experience may count toward graduation in disciplines. Contact the chair of the appropriate department for further information.

Types of Cooperative Work Experience Education

- A. General Work Experience Education (WEXP B250ab) 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 Director of Cooperative Work Experience Education or a counselor for more information.
- B. An Internship or Occupational Work Experience Education (WEXP B248ab and B249ab) is the extension of classroom occupational learning opportunities and career awareness into employment related to the student's major or occupational goal. Work Experience credit may be transferable to many colleges and universities. Contact the Director of Cooperative Work Experience Education or a counselor for specific information.

COURSE DESCRIPTIONS

The following abbreviations are commonly used in the course descriptions: **lect** lecture; **lab** laboratory; **demo** demonstration; **Repeat** repeatability (see policy on course repetition); **CCS** Course Classification System. Hours given in parentheses are total hours for the course. Hours lecture, lab, etc., are hours required per week usually. **Offered:** F=course is offered fall semester; S=course is offered spring semester; SS=course is offered summer session. If there is no designation, the course is offered irregularly. Check with the department for information. Many classes are offered occasionally during the summer. Check the summer class schedule for additional course listings. Prerequisites are expressed as minimum requirements. (CSU) indicates transferable to California State Universities; (UC) indicates transferable to University of California.

WORK EXPERIENCE

Credit limitations may apply. For specific information see a counselor or the transfer institution.

WEXP B248ab Cooperative Work Experience Education (1-8 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. Major or occupational goal must be job related. **Prerequisites:** Declared major or occupational goal and evaluation by Work Experience Director of student's qualifications and objectives.

Hours: B248a: 75 hours per semester, per credit unit at a paid job; B248b: 60 hours per semester credit unit at a non-paid job. **Offered:** F, S, SS. **Repeat:** 3. Limit of 16 units. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

WEXP B249ab 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 major or occupational goal, concurrent enrollment in seven or more units (including CWEE units, except summer school) and evaluation by Work Experience Director of student's qualifications and objectives. **Hours:** B249a: 75 hours per semester, per credit unit at a paid job; B249b: 60 hours per semester credit unit at a non-paid job. **Offered:** F, S, SS. **Repeat:** 3. Limit of 16 units. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

WEXP B250ab General Work Experience Education (1-3 units. Limit 6 units)

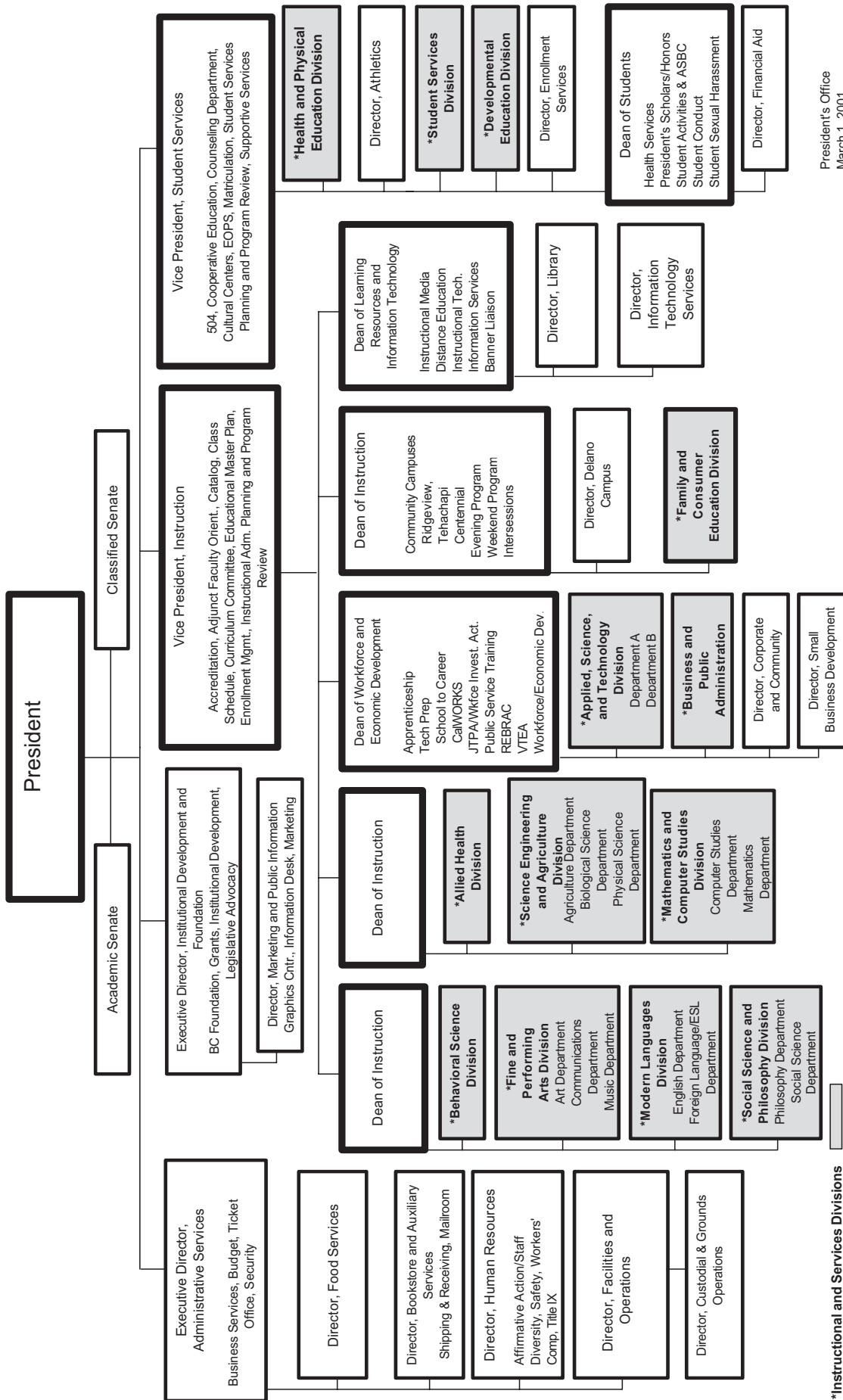
Offers students an opportunity to combine a planned occupational program with progressive on-the-job experience (OJT) and practical learning experiences in the world of work.

Prerequisites: (a) pursue a planned work experience program, (b) concurrent enrollment in seven or more units (including GWE units) except summer school, (c) evaluation by Work Experience Director of student's planned work experience program, qualifications and objectives. **Hours:** B250a: 75 hours per semester credit per credit unit at a paid job; B250b: 60 hours per semester credit unit at a non-paid job. **Repeat:** 3 or until a limit of 6 units is reached. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.



*Educational
Administration
and
Faculty*

Bakersfield College Administrative Organizational Structure 2001-2002



President's Office
March 1, 2001

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West, Charles Edward

Professor, Director of Cooperative Education, Job Placement, WA III, AmeriCorps

B.A., The University of Nebraska at Omaha; M.A., Central Michigan University

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Associate Professor, Computer Studies

A.A., Bakersfield College; B.S. California State University Chico; B.S., M.B.A., California State University, Bakersfield

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B.F.A., M.F.A., San Francisco Art Institute

Wise, Richard Evans

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B.A., University of California, Berkeley; M.S., California State University, Chico

Wright, Richard L.

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B.A., M.A., Kent State University; Ph.D., University of Northern Colorado

Yale, Thomas H.

Professor, Life Science

B.A., M.A., California State University, San Jose

ADJUNCT FACULTY

Instructors who have taught for Bakersfield College at least two years.

Aiello-Wise, Kathy Ann

Child Development

Allen, Muriel M.

English

Amin, Karimeh

Sociology

Amstutz, Jan "Sunny"

ESL

Anderson, Glen

Speech

- Armendariz, Bonnie L.**
Computer Information Systems
- Barnett, Leon**
Computer Information Systems
- Barr, Diane**
Academic Development
- Barrett, Jerome**
Speech
- Barter, Stephen**
Computer Information Systems
- Beck, Carol Sue**
Academic Development
- Beihl, John**
Speech
- Benz, Paula**
Health Educaiton
- Besst, David**
English
- Bingham, Gary D.**
Correctional Administration
- Blind, Russell**
Fire Technology
- Bluemel, Lawrence**
Academic Development
- Bowman, Carl**
Computer Information Systems
- Boyd, Isabelle**
French
- Boyd, Susan**
History
- Brackley, Joseph E.**
English
- Braun, Mary**
English
- Brown, Janice**
Business
- Bsharah, Steve W.**
History
- Buechler, Mary Ann**
Academic Development
- Burdick, Max**
Allied Health
- Canady, George**
Auto
- Cardell, Karen**
Child Development
- Carlson, Kamala**
Academic Development
- Carter, Leah**
Nutrition
- Casagrande, Richard**
Environmental Hazardous Materials
- Cater, Janet E.**
Mathematics
- Cater, Timothy A.**
Mathematics
- Cervantes, Ernest**
Music
- Cervantes, Elizabeth**
Music
- Champe, Kory**
Physical Science
- Chapman, Judy**
Child Development
- Chiou, Yuehmei**
Computer Information Systems
- Christiansen, Gary**
Summer Readiness Program
- Clark, David**
Real Estate
- Clason, Dean**
Fire Technology
- Clayton, Morgan**
Business
- Cohen, Mark**
Fire Technology
- Cohrs, John**
Architecture
- Collett, Stephen F.**
Astronomy
- Collier, Robert**
Industrial Drawing
- Colvin, Mildred**
Academic Development
- Constantine, Matthew**
Health Education, Food Service
- Contreras, Raul**
Spanish
- Covey, Mona**
Computer Information Systems
- Crabtree, Gary**
Real Estate
- Crawford, Denise Ann**
Workability III
- Crow, Cheryl Ann**
Business
- Crowe, Patricia**
Psychology
- Dahl, Jennifer**
Physical Education
- Dhanens, Paul**
Architecture
- Douglas, W. Scott**
Assistant Coach, Football
- Duncan, William H.**
Computer Information Systems
- Dupree, Michael**
Academic Development
- Eastwood, David**
History
- Encinas, Anthony**
Apprenticeship
- Espinoza, Frank A.**
Psychology, Sociology
- Evelano, Sharyn**
Psychology
- Feer, Charles**
Administraiton of Justice
- Fivecoat, Charles**
Political Science
- Foy, Jeanna**
Ornamental Horticulture
- Frailey, Philip M.**
Accounting
- Francis, Daran**
Animal Science
- Futrell, Sarah**
Health Education
- Gaede, June**
English
- Gambill, Jerry**
Fire Technology
- Gardner, Jill**
Anthropology
- Gay, Trisha**
Physical Education
- Gienger, William**
Social Science
- Goenawein, Allen D.**
Correctional Administration
- Graupman, Gary**
English
- Graves, Richard**
Mathematics
- Grays, Ronald**
Welding
- Greer, Clyde**
History
- Griebing, Graciela**
English
- Grimes, Michael**
Computer Information Systems
- Gude, Gail**
English
- Gunderson, Sarah**
History
- Gunshinan, Irene**
Child Development
- Haas, Karl**
Music
- Hailey, LeCostal, Jr.**
History, Fire Technology
- Hampton, Misako**
Physical Education
- Harte, John**
Journalism
- Hawkes, Robert**
Business

Haworth, Bryan “Tony”

Mathematics

Haycock, Gina

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Apprenticeship

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Academic Development

Hicks, Junko

English

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Child Development

Holland, Carole Ann

Mathematics

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Fire Technology

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Speech

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History

Huey, Ralph

Environmental Hazardous Materials

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Apprenticeship

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Forestry

Kerfoot, Michael

Animal Science

Killingsworth, Barbara

Art

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Mathematics

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English

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Mathematics

Knudsen, William

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Forestry

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Art

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Music

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Mathematics

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Sociology

McKenna, Laura

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Mello, Lynette

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Apprenticeship 60

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History

Mieh, Thomas

Mathematics

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History

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Water Treatment

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Environmental Hazardous Materials

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Behavioral Science

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Family And Consumer Education

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Howard, Paul M.

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Hoyt, Barbara

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Communications
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Life Science
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Philosophy
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Allied Health
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Art
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- Salaverriaz, Helena**
Foreign Language
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English
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Classified Personnel Director
- Self, Mary Anne**
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Communications
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Music
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Administration
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Family And Consumer Education
- Sheldon, Harriett**
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Administration
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English
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Mathematics
- Trusler, Willard W.**
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- Turner, James B.**
Physical Education
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Social Science
- Wall, Wendell Edgar**
Biology
- Walker, William W.**
Communications
- Walt, Robb**
Industrial Education
- Ward, Ray M.**
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- Warren, Harvey**
Counseling
- Wattron, Frank**
Administration
- Webster, Persis**
Foreign Language
- Webb, Henry R.**
Theatre Arts
- Wessman, Rodney G.**
Business
- Wetzler, John**
Library
- Whetsler, Dell V.**
Administration
- Wickey, Robert**
Physical Science
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English
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