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**BAKERSFIELD COLLEGE**  
2011-12 Catalog  
If this material is needed in alternate format for people with disabilities, please contact Disabled Student Programs & Services at 395-4334.

**Disclaimer**  
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. Addenda may be found on the college website (BakersfieldCollege.edu).

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On behalf of our faculty and staff, welcome to Bakersfield College. You have made a major commitment by deciding to attend college. It takes a commitment of time, energy and money to obtain a higher education. The rewards for making that investment may also mean a better career, better paycheck and better life for you. If these are your goals, you are in the right place.

Bakersfield College was founded in 1913 with an eye on the future and a healthy respect for the past. For nearly 100 years, Bakersfield College has made it possible for students to become better prepared to transfer to a four-year university, or to improve their career options. You are joining a long tradition of students who have benefited from a community college education.

This is an interesting time in the history of our state. Every day there seems to be more news about state budget deficits, higher taxes, and a rising cost of living. Bakersfield College has not been immune to these ongoing problems. But at Bakersfield College, we are taking the necessary steps to provide students with affordable, quality, higher education. If you are willing and able to benefit from attendance, Bakersfield College is the right choice for you.

We ask that you do your part to make your time at Bakersfield College successful inside and outside of the classroom. Because of the state budget deficits, you may have to make adjustments in your schedule due to fewer course offerings or you may find services are reduced. But remember the decision you made to attend college and the rewards of a higher education. Our staff is here to answer your questions, hear your concerns and guide you as you make important decisions about your education. Use this catalog as a primary resource.

It is our responsibility to support the kinds of programs, events, and activities that will provide you with a well-rounded educational experience; we encourage you to take advantage of all we have to offer. Ultimately, it is your responsibility to invest the time and effort required to earn a college education. Making that investment will lead to your success at Bakersfield College.

Dr. Greg A. Chamberlain
President
History
Established in 1913, Bakersfield College is one of the oldest two-year community colleges in the nation. The initial program offered a one-year curriculum, and in 1915 the trustees of the Kern County High School and Junior College District authorized a second year of junior college and normal school courses. The college opened its present day campus high above the Panorama bluffs in 1956. Bakersfield College offers courses at its satellite campuses located in downtown Bakersfield at the Weill Institute, at its Delano Campus and other locations in Kern County.

The 153-acre Panorama campus features a state-of-the-art library and technology center and a 19,000-seat stadium that is the crown jewel of community colleges nationwide. With the dedication and opening of the William A. Wheeler Aquatic Center in 2003, an expanded fitness center, and a student success center, Bakersfield College students now enjoy the ability to experience growth in academic, as well as physical and social activities.

Bakersfield College boasts top-notch facilities that are second to none among California Community Colleges. State and bond-funded construction will continue to upgrade facilities to help students achieve their academic goals.

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.
• 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
With its heritage as a foundation and eye toward the future, Bakersfield College provides the high quality education necessary for our socially and ethnically diverse students—whether they be vocational, transfer-oriented, developmental, or some combination of these—to thrive in a rapidly changing world.

We will accomplish our mission by:
• Establishing strong connections with our student and business communities

• Understanding the needs of our diverse student population
• Responding to student and community needs with efficiency and flexibility
• Honoring our long heritage of community involvement
• Remaining vigilant in scanning our present and future environment within which we operate
• Promoting tolerance and patience with all of our stakeholders

College Strategic Initiatives
• Improve student access, retention, and success.
• Provide effective learning and earning pathways for students.
• Support student learning through appropriate technology.
• Support student learning through streamlined systems and processes.

Department of Institutional Development and Foundation
Mission
The Office of Institutional Development promotes, develops and supports Bakersfield College students, faculty and staff. It is guided by the educational master plan and is committed to provide service to this institution of higher learning. The College goals provide the direction and vision upon which the office focuses to support its purposes.

Purpose
The office exists to support Bakersfield College in the following areas: creating resources from community and business partnerships, developing and disseminating information to meet the needs of the institution, enhancing the institution’s image, supporting the development of educational programs, and supporting student scholarship and student aid opportunities.

The units within this department are Foundation and the Alumni Association.

Foundation
The purpose of the Bakersfield College Foundation is to provide capital campaign support, student support through scholarships and community contact for mentoring and curriculum resources, faculty and staff support through grants and aid, and numerous supplemental educational opportunities for staff and students. Foundation activities provided funds to finance scholarships and awards last year which directly benefited over 500 Bakersfield College students including the President’s Scholars. The Foundation and its board of directors provide a direct liaison for financial support between the College and the community. The Foundation also assists Bakersfield College students, administration, faculty and staff to attain the College’s and community’s educational goals.

Total 2009/2010 Foundation assets exceeded $14 million of which the majority is invested in bonds and equities. Income is derived from contributions, investment earnings, dues, and program income. Expenditures are primarily for scholarships,
program expenses, student loans and awards, public relations and Foundation operating expenses. The Foundation provided nearly $500,000 last year to students.

The Bakersfield College Alumni Association is available to all individuals who have a benevolent interest in the College to keep in contact with friends and maintain an association with the College. Bakersfield College Alumni solicit contributions and participation through dues and events, including the annual Bakersfield College Barbecue in September. All monies collected by this active volunteer group directly benefit Bakersfield College students through student awards and scholarships as well as contributions to many other student affiliated school programs.

The Foundation and Alumni Offices are located at Bakersfield College in the Administration Building, Room 19, 1801 Panorama Drive, Bakersfield, CA 93305. Telephone (661) 395-4800. Website address: http://www.bakersfieldcollege.edu/foundation/, or www.bcfoundation.net

Delano Campus Foundation
The Delano Campus Foundation is an auxiliary of the Bakersfield College Foundation. It was established in 1975 to ensure that no student would be turned away for lack of money. This auxiliary has distributed more than $250,000 in scholarships, grants and gifts to the students of the Delano Campus. It hosts a yearly scholarship awards night at the end of each spring semester that honors scholarship winners and their families and donors. The event is held on the Delano campus, and the public, including civic, business and educational leaders, and students and staff regularly attend. The Delano Campus Foundation can be reached at (661) 720-2000, or through the Bakersfield College Foundation office at (661) 395-4800. Friends and supporters of Bakersfield College’s Delano campus are invited to support the Delano campus through this auxiliary.

Norman Levan Center for the Humanities
The Norman Levan Center for the Humanities, made possible through a generous gift from Bakersfield physician Dr. Norman Levan, is a 4,400 square-foot campus facility that houses a large seminar hall, offices, the Levan Library, and outdoor seminar areas.

The mission of the Levan Center is to provide programs that focus on and foster greater appreciation of the humanities, explore the relevance of the humanities to the practice of medicine, examine and support ethical behavior in business and the professions, recognize and encourage scholarship and intellectual exchange among Bakersfield College faculty and students, and involve the Bakersfield community in examining the importance of the humanities in the lives of people.

The Levan Center sponsors lectures, panel discussions, topical seminars, humanities book discussion groups, conferences, and retreats. It awards annual Humanities Essay Scholarships to Bakersfield College students and Summer Scholarship Grants to Bakersfield College faculty, and it supports humanities programs on campus and collaborates with community organizations.

The Center Office is located at Bakersfield College in the Norman Levan Center for the Humanities, 1801 Panorama Drive, Bakersfield, CA 93305. For information, contact Jack Hernandez, Director, at (661) 395-4339 or Email:jhernand@bakersfieldcollege.edu. Website address: http://www.bakersfieldcollege.edu/levancenter/.

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, 10 Commercial Boulevard, Suite 204, Novato, California, 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.

Student Right to Know
In compliance with the federal Student Right-to-Know (SRTK) Act of 1990 (Public Law 101-542), it is the policy of Bakersfield College to publish its student completion and transfer rates. These rates are based on a limited cohort (or group) of students which are tracked for a three-year period. The cohort is limited because it includes only students who entered Bakersfield College in the fall term as first-time, full-time students seeking a degree, certificate or transfer. Students included in the 2006 SRTK Cohort were tracked from Fall 2006 through Spring 2009 to determine their academic outcomes during the time period.

A student is included in the Completion Rate if they attained a certificate or degree or became ‘transfer prepared’ within the three-year period. Transfer-prepared is defined as having completed 60 transferable units with a GPA of 2.0 or better.

A student is included in the Transfer Rate if, within the three-year tracking period, they transferred to another postsecondary institution prior to receiving a certificate or degree or becoming ‘transfer-prepared’.

The table below compares Bakersfield College’s Completion and Transfer Rates to the statewide community college average.
These rates do not represent the completion and transfer rates of the entire student population at Bakersfield College nor do they account for student outcomes occurring after the three-year tracking period. For further information on SRTK methodology, interpretation and rates at other community colleges, you can visit the California Community College Chancellor’s Office web site at http://srtk.cccco.edu/index.asp.

**Academic Calendar**

**Fall Semester 2011 (August 22 - December 9)**
- April 13 ................. Early web registration begins
- April 28 ................. Open web registration begins
- August 22 ................ Instruction Begins
- September 2 ............ *Last Day for a Refund for Semester-Length Classes
- September 5 ............ Labor Day Holiday
- September 6 ............ Last Day to Add a Semester-Length Class with Approved Add Form
- September 19 .......... *Last Day to Drop From a Semester-Length Class Without Receiving a "W"
- October 31 .............. *Last Day to Withdraw From a Semester-Length Class and Receive a "W"
- November 1 ............. Last Day to File for Graduation
- November 11 .......... Veterans’ Day Holiday
- November 17 ............ Early Web Registration Begins
- November 24-25 ...... Thanksgiving Holidays
- November 30 ........... Open Web Registration Begins
- December 9 ............. End of Fall Semester

**Spring Semester 2012 (January 17 - May 11)**
- November 17 .......... Early web registration begins
- November 30 ........... Open web registration begins
- January 17 ............. Instruction Begins
- January 27 .............. *Last Day for a Refund for Semester-Length Classes
- January 30 ............. Last Day to Add a Semester-Length Class with Approved Add Form
- February 17 .......... Lincoln Day Holiday
- February 20 ............ Washington Day Holiday
- February 21 .......... *Last Day to Drop From a Semester-Length Class Without Receiving a "W"
- March 30 ............... *Last Day to Withdraw From a Semester-Length Class and Receive a "W"
- April 1 ................. Last Day to File for Graduation
- April 12 ............... Early Web Reg. Registration Begins
- April 2 - April 6 ...... Spring Recess
- April 26 .................. Open Web Registration Begins
- May 11 .................... Commencement
- May 11 .................... End of Spring Semester

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

**Equal Employment 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 and the Americans with Disabilities Act of 1990.)

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 students’ education through any means of illegal or immoral intimidation.

Kern Community College District will afford reasonable accommodations for applicants and employees to enable qualified individuals to perform essential job functions. Students with disabilities will be accommodated to ensure accessibility and full participation in educational programs. To request reasonable accommodations, applicants and employees should contact the Human Resources Manager at (661) 395-4660. Students should contact Disabled Student Programs and Services at (661) 395-4334.

**Unlawful Discrimination**

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

Human Resources Manager
1801 Panorama Drive
Bakersfield, CA 93305
(661) 395-4660

Additional inquiries pertaining to federal, state, and local equal opportunity laws, and the governing board policies of Bakersfield College or Kern Community College District (KCCD Board Policy Section 11-D) may be directed to the following office:

Vice-Chancellor, Human Resources
Kern Community College District
2100 Chester Avenue
Bakersfield, CA 93301
(661) 336-5140

**Declaración De Igualdad de Oportunidad**

De acuerdo con los requisitos de la acta de derechos civiles,
Bakersfield College provides services and benefits to all students without regard to race, color, national origin, ancestry, gender, age, religion, marital status, or disability. The failure of the College to conduct discriminatory actions is voluntary. Any student choosing not to participate in this program may contact Disabled Student Programs & Services at (661) 395-4334. Participation is voluntary. Students choosing not to participate in this program may elect an alternate path for services through the office of the Dean of Students.

**Discriminación ilegal**

Una queja de discriminación ilegal supuesta se puede registrar dentro del término de un año de ocurrida la supuesta discriminación. Para obtener formas de quejas o información adicional en contacto con la siguiente persona:

Human Resources Manager  
1801 Panorama Drive  
Bakersfield, CA 93305  
(661) 395-4660

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

Vice-Chancellor, Human Resources  
Kern Community College District  
2100 Chester Avenue  
Bakersfield, CA 93301  
(661) 336-5140

**Students with Disabilities**

Bakersfield College will make reasonable accommodations and/or academic adjustments to ensure that students with disabilities have an equal opportunity to participate in the college’s courses, programs and activities, including extracurricular activities. Students with disabilities who are requesting academic accommodations or auxiliary aids should contact Disabled Student Programs & Services at (661) 395-4334. For DSP&S services at the Delano Campus, please contact (661)-720-2000. Participation by students with disabilities in Disabled Student Programs & Services is voluntary. Any student choosing not to participate in the program may elect an alternate path for services through the office of the Dean of Students.

The Bakersfield College Curriculum Committee approved the following Accessibility Statement: “Bakersfield College recognizes the importance and benefits of using technology to enhance student learning, especially as it helps students, faculty and staff communicate more effectively. Every effort will be made to ensure that the design of instructional material and activities for ALL classes taught at Bakersfield College, both face-to-face and at a distance, are accessible to all students, including those with disabilities.”

**Estudiantes Incapacitados**

Bakersfield College proveerá servicio y/o arreglos académicos para asegurar que estudiantes incapacitados tengan oportunidades iguales para participar en las clases de esta escuela, incluyendo actividades extraescolares. Tales estudiantes que piden arreglos o aparatos auxiliares deben llamar a Disabled Student Programs and Services a (661)-395-4334. Participación es voluntaria. Estudiantes que no desean participar en este programa pueden ponerse en contacto con la oficina del Decano de Aprendizaje/Servicios Auxiliares.

**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, officials of the United States Department of Education; 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. If a student does not want this information released, the student must check the privacy requested box on the admission/update forms.

Present and former Bakersfield College 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 Director of Enrollment Services, (661)-395-4301, Room A-7. Copies of the Bakersfield College FERPA Policy are available in the Office of Admissions and Records.
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*, amended 1991, 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 and complaint procedures. Students should refer to this publication for further information.
Admission and Registration
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.

International Students
Students from countries outside of the United States are eligible to attend Bakersfield College if they have the equivalent of U.S. high school diploma, a TOEFL score of 450 or higher on a paper-based exam or 133 or higher on a computer based exam, and sufficient financial resources to pay all expenses.

Admissions Form
An admissions form may be completed on the college web page (Bakersfieldcollege.edu). It must be filed prior to registration. The application should include the prospective student’s social security number. The Social Security number will not appear on class roll sheets.

Changing Identification Numbers
All students are assigned an identification number when a completed admissions form is submitted to the Office of Admissions and Records. Students may use the assigned numbers or their Social Security numbers to access their academic records.

Changing Names, Addresses, Telephone Numbers or E-mail Addresses
Students may change their name by bringing a photo identification to the Office of Admissions and Records. They may change their address, telephone number, or e-mail address on the web at Bakersfieldcollege.edu. To do that they must select “Register for Classes,” login and then select “Personal Information.”

Personal Identification Numbers
When prospective students complete their admission forms online, they will be asked to create a password or a personal identification number (PIN). The number must be 8-20
characters long, containing letters and numbers. Students should select combinations that they will be able to remember but that other people would be unable to know.

The first time that students login to register they will be asked to select a PIN hint question from a drop down menu. They fill in the answer to the question that they select with a one or two word answer. Then, when students forget their passwords/PINs/, they can click the “Forgot password” button, and if they enter the correct response, they will be given a screen on which to enter a new password.

**Matriculation**

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 the student to form a partnership which helps attain that goal. The college asks students to commit themselves to an educational objective and the college commits to fostering student success. To ensure the success of the partnership:

The college agrees to provide:

- An admission process
- An assessment of basic educational skills and career goals
- Counseling/advising for the development of an individual education plan
- Quality instruction
- A wide variety of courses
- Referral to support services as necessary
- Follow up on student academic progress

Students are expected to:

- Complete an orientation session
- Complete assessment
- Declare a specific educational objective or career pathway after completing 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 the individual student education plan
- Seek out support services as needed

**Assessment 395-4479**

Academic skills assessment is designed to determine students’ entry level skills in reading, writing and math. The writing of an English essay may be required for placement in an English composition course (ENGL B1a, ENGL B50, ENGL B60, ACDV B68 or an English as a Second Language (ENSL) writing course. 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.

**Assessment Policy for Students with Disabilities 395-4334**

Persons with disabilities who might require testing accommodations should contact Disabled Student Programs and Services. 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. These tests take place in the Assessment Center.

**Policy for Students Whose Native Language is not English**

Persons whose primary language is not English are encouraged to take the ESL assessment. Orientation for students whose primary language is not English is scheduled on campus and at the Delano Community Campus.

**Exemptions**

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, reading, 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 that have prerequisite requirements. Information is available in the Office of Admissions and Records and the Counseling Center.

Students have the right to challenge or appeal any allegation of violation of matriculation regulations.

**Student Educational Plans (SEP)**

When students have completed 15 units of course work, they are required to complete their student educational plan (SEP) to identify their educational goals and the courses, services, and programs that will be used to achieve them. These plans may be revised at any time.

**Registering for Classes**

**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.
Matriculation and Registration

<table>
<thead>
<tr>
<th>As a new student . . .</th>
<th>As a continuing student . . .</th>
<th>As a former student . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>If you have received a two-year or higher degree from another college but are new to BC, you are exempt from the requirements for orientation, assessment and counseling. However, we encourage you to take advantage of any of these services you find helpful.</td>
<td>Enrolled in current semester classes</td>
<td>Enrolled in BC classes in the past but not in the current semester</td>
</tr>
</tbody>
</table>

Admission or Update

- Submit completed admissions form
  - at www.bakersfieldcollege.edu
  - Foreign students holding visas must contact the Admissions & Records Office for admission procedures.

Orientation

- Students are expected to participate in an orientation session before assessment testing.
- Orientation schedules can be found:
  - at www.bakersfieldcollege.edu
  - in Admissions & Records on the main campus
  - at the Delano campus

If you attended an orientation, skip this step.

Assessment

- You must participate in assessment if you plan to:
  - take an English, Math, or other class with prerequisites
  - earn a degree
  - earn a certificate
  - transfer
  - assessment information can be found @www.bakersfieldcollege.edu or 661-395-4200
    - Students can request:
      - English as a Second Language assessment by calling 395-4479
      - Accommodations for disabilities by calling 395-4334

- If previously completed BC assessment, skip this step.

Counseling

- Counselors will help you:
  - review assessment and other criteria for course placement
  - identify your educational goal
  - choose classes
  - inform you of special services

Registration

- Open web registration begins late in a semester for the following term.
  - Students who are fully matriculated and enrolled in classes on Monday of the third week of a semester will receive an appointment for early registration for the following semester.

- Students should register for the waitlist for closed classes. Instructors do not sign add slips.
Prerequisites
Many Bakersfield College courses have basic skills or course prerequisites. These prerequisites are established to assist students in selecting courses for which they have the entry level skills. Students who believe that they have the entry level skills without the appropriate assessment test score or previous course may challenge the prerequisite. Students 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.

Early Registration Appointments
Continuing students who were registered on Monday of the third week of classes are assigned early registration appointments for the following semester in the following order:
- Students who belong to specific groups or special programs and who have completed matriculation.
- Students who have completed orientation, assessment, counseling and have a student educational plan on file in descending order of the number of units completed, except that students who have completed 45 to 68 units will be first.

Registering by Web
All early and open registration takes place on Bakersfield College’s web registration system. Detailed instructions for the use of this system can be found in the Registration Information Flyer, on the Bakersfield College website at BakersfieldCollege.edu under class schedule.

Students must be officially registered or on the official waitlist before attending classes. Registration dates are indicated in the “About the College” section of this catalog and in the class schedule.

Web registration is available all semester except for holidays and special dates. The college web page is available from 8:00 a.m. to 2:00 a.m. daily except Sunday.

Waitlist
The electronic waitlist feature replaces instructor-signed add slips and allows students from an established waitlist to be moved into a class when seats are available. It is a true first-come, first-serve system. Students trying to register for classes that are closed will be able to select waitlist. During the weeks prior to the start of classes, when vacancies occur in classes, the first student(s) on the waitlist will be moved into the class.

Students who are on a waitlist should check their registration regularly on the web. They will have ten (10) days to pay for the class once they have moved into registered status. Students will not be charged the enrollment fees for waitlist classes until they are actually enrolled in the class.

Students should use the waitlist to ensure themselves a chance of getting into the classes they want.

Students on waitlists still must attend the first meeting of the class or they may be dropped from the waitlist. The prerequisite, basic skills, time conflict and repeat checks will prevent ineligible students from moving into the classes.

Students should drop themselves from a waitlist for any class that they no longer wish to take. If a new section of a class is opened at the same day and time as a section with a waitlist, students on the waitlist will be automatically enrolled into the new section.

Maximum Study Loads
Students may enroll in a maximum of 19 units per semester and 7 units in summer. Students with strong academic records may be cleared to enroll in more units by a counselor.

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, 33, 34, 35 or 1606, Title 38 U.S. Code.
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.

Repeating a Course
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. Only second attempts will replace the first substandard grade.
The original and subsequent grades will remain a part of the student’s permanent record.

If a student earns any combination of “D,” “F,” or “W” on two attempts in a course taken in the Kern Community College District, that student can only register for a third time with the signature of the faculty chair of the department on a Request to Repeat a Course Beyond the Limit form.

In compliance with Title 5 California Code of Regulations Section 56029, certain course repeats may be authorized for students with disabilities following DSPS policies and procedures.

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. 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.

A student may repeat a course to meet a legally mandated training requirement as a condition of continued paid or volunteer employment. The course may be repeated for credit any number of times, regardless of whether or not substandard work was previously recorded, and the grade received each time shall be included for purposes of calculating the student’s grade point average.

The college can provide no assurance that repeated courses will be treated in a similar manner by other educational institutions.

Remedial Coursework Limitation
Remedial coursework refers to precollegiate basic skills courses defined as courses in reading, writing, computation, learning skills and English as a Second Language, which are designated as non-degree credit courses. No student shall receive more than thirty (30) semester units of credit for remedial coursework within the Kern Community College district, except for the following: 1) students currently enrolled in one or more courses of English as a Second Language, 2) students identified by the College as having a qualifying disability.

Auditing a Course
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 $15 per unit. (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.

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

Academic Standing
A student who is not in good academic standing will have a hold placed on his/her record until he/she meets with a counselor to make plans to improve his/her grades. These holds will prevent registration.

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’, ‘NC’ and ‘NP’ 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’, ‘NC’ and ‘NP’ 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,’ ‘NC’ and ‘NP’ was less than 50 percent, in which case the student shall be placed on continued probation.

Reinstatement
A student who is disqualified is ineligible to attend Bakersfield College. He/she may be conditionally readmitted the following semester upon petition to the Counseling Center. A readmitted student may be restricted to specific courses or programs and a limitation will be placed on the number of units attempted. Reinstatement application forms may be obtained in the Counseling Center.

Alternate Class Formats
Extended Learning – (661) 395-4694
Extended Learning consists of courses offered from a wide variety of disciplines using non-traditional delivery methods: Interactive, Online, and Hybrid. Dependent upon semester scheduling, Extended Learning provides additional educational options to anyone seeking a college education: students dealing with family and/or job commitments, time limitations or transportation difficulties, individuals willing to explore a less traditional presentation of course content and students who choose to not come to campus for traditionally presented classes. Regardless of the mode of delivery, students receive the same course content described in the catalog and will face the same course expectations.

Bakersfield College Interactive courses connect with classrooms on the Delano Campus, thirty-five (35) miles north of Bakersfield. Interactive classes may also connect with classes at Porterville College and/or Cerro Coso College. Instructors may teach from an origination site at any of the campuses, using real-time two-way video/two-way audio technology (TVs). Students benefit from interactivity with students enrolled at one or more remote locations.

Bakersfield College offers a variety of online courses, allowing students to self-select classes free of any geographic and time boundaries. It is vital that students have a basic understanding of computer usage, dependable access to the internet, and know how to send and receive e-mail.

Hybrid courses use the internet as the predominate delivery method combined with traditional face-to-face (F2F) classroom sessions. Students must be able to come to the main Bakersfield College campus for an orientation or session during the semester as well as have access to and be able to use the internet.

Specific information is available on Bakersfield College’s website: http://www.bakersfieldcollege.edu. Information is also available by calling the Extended Learning Office, (661) 395-4694 or via e-mail: kloomis@bakersfieldcollege.edu.

Learning Communities 395-4067
Bakersfield College offers an interdisciplinary learning community program which gives students the opportunity to develop necessary college skills while gaining individual support within an organized group of learners. In each community students are enrolled in several common classes. Faculty work together with each other and with these students to enhance the students’ retention and success potential. There are several learning communities that combine a variety of classes, most typically reading, writing, and study skills within the cohort. At least one option is offered each semester. Check the schedule of classes for the most current learning community courses being offered.

Types of Cooperative Work Experience Education
A. General Work Experience Education (WEXP B250) is supervised employment which is intended to assist students in acquiring desirable work habits, attitudes and career awareness. The work experience need not be related to the students’ educational goals. Contact the Director of Cooperative Work Experience or a counselor for more information.

B. Occupational Work Experience Education (WEXP B248 and B249) is supervised employment extending classroom based occupational learning at an on-the-job station relating to the students’ educational or occupational goal. Work experience credit may be transferable to many colleges and universities. Contact the Director of Cooperative Work Experience or a counselor for more information.

Precollegiate Courses 395-4067
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.

**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 disability.

**Evening and Weekend Program 395-4202**
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.

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

**Delano Campus 720-2000**
The Delano Campus provides the community with access to Bakersfield College programs and services. Our students live in Delano and the rural communities of Northern Kern and Southern Tulare counties. Day and evening general education, transfer and vocational courses are available to help students obtain an Associate in Arts Degree or technical certification. Student and instructional support services include Counseling, Financial Advising, Educational Advising, Assessment Testing, Disabled Student Programs and Services, Extended Opportunity Programs & Services, Computer Lab, Multi-Subject Tutoring, ESL Tutoring, Admissions, Registration and more. The Delano Campus is located at 1450 Timmons Avenue, Delano, California. For information call (661) 720-2000.

**Weill Institute 395-4195**
The Weill Institute is located in downtown Bakersfield at 21st Street and Chester Avenue (with parking and main entry in the back parking lot off of L Street). The evening instructional program provides a variety of vocational, general education and transfer courses. Both semester-length and short-term courses are available.

**Weill Institute Business Center 395-4104**
The Weill Institute Business Center provides economic and workforce development services. The needs of business, industry and the workforce are met with a highly-skilled staff that provide customized training, job skill assessment, bilingual training, performance consulting, organizational development and many other services. The Business Center also operates the California Compliance School and the Regional Environmental Business Assistance Center (REBRAC). For more information about any of these services, call 395-4104.

Also located at the Weill Institute Business Center is the Business Assistance Center, which operates under grants from the U.S. Small Business Administration, the Chancellor’s Office of California Community Colleges and other agencies. The Business Assistance Center offers free counseling to small business owners and individuals interested in starting a business in Kern, Inyo, and Mono Counties. Affordable seminars and workshops are held on a regular basis for practical guidance in owning and operating a small business. Call 395-4126 for more information.

**College Fees, Tuition, and Fee Refunds**

**Community College Enrollment Fees**
Enrollment fees are undetermined at the time of publication. Students will be billed $36 per unit. A supplemental email bill will be sent if the state increases the fees.

**Non-Resident Tuition Fee**
Non-resident students are required by state law to pay tuition in addition to enrollment fees. The tuition fee for non-resident students is $173 per unit up to a maximum of 15 units per semester. There is an additional $30 per unit capital outlay fee for non-residents.

**California Nonresident Tuition Exemption For Eligible California High School Graduates**
A law was passed by the Legislature in 2001 known as “AB 540.” Any student, other than a nonimmigrant alien, who meets all of the following requirements, shall be exempt from paying nonresident tuition at the California Community Colleges, the California State University and the University of California (all public colleges and universities in California).

**Requirements:**
- The student must have attended a high school (public or private) in California for three or more years.
• The student must have graduated from a California high school or attained the equivalent prior to the start of the term (for example, passing the GED or California High School Proficiency exam).
• An alien student who is without lawful immigration status must file an affidavit with the college or university stating that he or she has filed an application to legalize his or her immigration status, or will file an application as soon as he or she is eligible to do so.

Students who are nonimmigrants [for example, those who hold F (student) visas, B (visitor) visas, etc.] are not eligible for this exemption. The student must file an exemption request including a signed affidavit with the college that indicates the student has met all applicable conditions described above. Student information obtained in this process is strictly confidential unless disclosure is required under law. Students eligible for this exemption who are transferring to another California public college or university must submit a new request (and documentation if required) to each college under consideration. Nonresident students meeting the criteria will be exempted from the payment of nonresident tuition, but they will not be classified as California residents. They continue to be “nonresidents.” AB540 does not provide student financial aid eligibility for undocumented alien students. These students remain ineligible for state and federal financial aid.

Procedures For Requesting This Exemption From Nonresident Tuition
California Community Colleges: Complete the form in the Office of Admissions and Records. You may be required to submit additional documentation. Call the college Admissions Office if you have questions.

University of California: The University of California (UC) system has its own nonresident tuition exemption application and affidavit form, but it will ill accept the exemption request form used by the California Community Colleges and the California State University. Your campus has established deadlines for submission of exemption requests; however, requests are not to be submitted until you have been admitted to a UC campus. Some students, such as transfer, graduate, and professional students, also must submit their official high school transcripts; check your caps for specific instructions. Once you are determined to be eligible for the exemption, you will continue to receive it as long as you fulfill the eligibility requirements or until the University no longer offers this exemption. The exemption covers the Nonresident Tuition Fee and Educational Fee differential charged to nonresident students. Applying for the exemption does not alter your responsibility to pay by the campus deadline any nonresident tuition and associated fees that may be due before your eligibility is determined. For general information, visit the following website: www.ucop.edu/sas/sfs/policies/ab540faqs.ht. For campus-specific instructions regarding documentation and deadline dates, contact the campus Office of the Registrar.

California State University: Contact the Office of Admission and Records at the CSU campus where you are enrolled or intend to enroll for instructions on submission, deadline information, and additional requirements. You will be required to submit final high school transcripts and appropriate records of high school graduation or the equivalent, if you have not done so already. Call the Office of Admissions and Records at the campus if you have questions.

Student Health Fee
A $13 student health fee has been authorized by the Board of Trustees for all students attending classes on the main campus or Delano Campus during the fall or spring semester. The fee is $10 for summer session. The purpose of the fee is to make health-center services available to all main campus and Delano 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.

Exemption form is available in the Office of Admissions and Records (Room A-7).

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.

Student Representation Fee
A student representation fee of $1 is charged to all students. This fee will be utilized by the Student Government Association.

• Attendance at conferences and meetings of student non-partisan organizations.
• Organizational dues and/or special donations to statewide student organizations or any other recognized student lobby association that works on behalf of community college students.
• Purchasing of equipment used for lobbying and/or advocacy such as computers, printers, faxes, modems, software, and accessories.
• Subscriptions to newsletters and/or magazines of higher education.
• Travel expenses for lobbying and/or advocacy for students.
• Leadership training, awareness, and information.
• Hosting non-partisan conferences of legislative issues.
SGA Discount Card Fees
The SGA discount card, which allows a 5% discount at the Bakersfield College Bookstore, may be purchased for a $15 fee. Contact Student Activities Office at 395-4355.

Parking Fees 395-4554
Parking on the main campus and the Delano Campus is restricted to parking permit holders during all twelve months of the year. A semester parking permit is $30 and a summer permit is $15. Parking permits are not required on weekends. Visitor parking and handicapped parking is enforced at all times. To obtain a student permit go to: www.thepermitstore.com.

Books
It is estimated that the cost of books and supplies will be $650 to $850 per semester for a 15-unit schedule. Books may be purchased at the college bookstore (395-4506) which is open year-round except during college holidays.

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 (395-4488) 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 time frame, 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 and Delano 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.)

Attendance Policies
Class Attendance
Regular class attendance is expected of all students enrolled in the college. It is especially important that students attend the first sessions of each class for it is during those classes 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 sessions. Students on a course waitlist should also attend the first class meeting to avoid being dropped.

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.

First-Day Drop Policy
Because many classes become filled and are closed, students in lecture and/or lab courses may be dropped if they do not attend the first class meetings without notifying the instructor.

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

Distance Education Attendance and Non-Participation Policy
All students enrolled in Distance Education courses must log in to the course(s) and complete any assignment(s) or other activities, to be determined by the instructor, that are required during the first week. Students who fail to complete first-week assignments/activities within the instructor’s deadline will be dropped.
After the first week and during the time period before the final withdrawal date, “students are responsible for officially withdrawing from any class or classes in which they no longer wish to be enrolled,” as stated in the Bakersfield College Catalog. (See the catalog section “Withdrawing from Classes” for additional details.)

The Bakersfield College “Attendance Policies: Class Attendance” (see the BC catalog) states that “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.” In the case of Distance Education, “absences” shall be defined as “non-participation.” Instructors may drop students after the equivalent of two weeks of non-participation from the first day of class. Non-participation shall be defined as, but is not limited to:

- Not following the instructor’s participation guidelines as stated in the syllabus
- Not submitting required assignments
- Not contributing meaningful discussion in required chat rooms, discussion boards, or other online forums
- Not participating in scheduled activities
- Failure to communicate with the instructor as required

It should be noted that simply logging into the course, does not constitute participation. Students must demonstrate that they are actively participating in the course by submitting required assignments, contributing to discussion forums, etc. as outlined above.

**Withdrawing From Classes**

Students are responsible for officially withdrawing from any class, classes, or waitlist 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 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 60 percent date of the term. No ‘W’ grades may be issued after the 60 percent date. In courses other than semester length, the instructor or Admissions and Records Office should be consulted regarding withdrawal date deadlines.

A student may contact the Office of Admissions and Records regarding the procedure to drop or withdraw after the final withdrawal date deadline if there are verifiable extenuating circumstances. Examples of verifiable extenuating circumstances may be: accidents, illness, death of an immediate family member, or other circumstances beyond the control of the student. 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 they pay all fines and debts owed the college.

**College Transcripts 395-4338**

Upon written application by the student, a transcript of all work completed at Bakersfield College will be prepared and forwarded to any college, university, employer, or individual designated by the student. Two transcripts are provided free; thereafter, a fee of $4 is charged for each transcript. Transcript requests are submitted to the Office of Admissions and Records on a form that is available at the office or from the Bakersfield College home page (BakersfieldCollege.edu) by clicking transcripts and following the onscreen directions. Orders are processed within eight working days. An additional fee of $8 is charged for processing a transcript ‘rush’ request within 2 hours. To receive a transcript with same day service, the request must be made between 8:00 a.m. and 3:00 p.m. Monday through Thursday or between 8:00 and 9:30 a.m. on Friday.

Students have the right to notify the college not to include their date of birth (DOB) in their transcripts. DOB is a very useful identifier, and students are encouraged to have it displayed on transcripts. However, under the law, students have a right to request that their DOB not be displayed on their college transcripts.

**Verification of Enrollment 395-4303**

The Office of Admissions and Records will complete a verification of enrollment upon written request by the student. A fee of $2 is charged for each verification. The $2 fee is waived for financial aid academic progress verification.

**Student’s Schedule of Classes**

Individual student class schedules are available on the web registration system (BakersfieldCollege.edu).
Student Services
Assessment Center 395-4479
The Bakersfield College Assessment Center offers the following tests: Compass, the General Education Development (GED) test, the College Level Examination Program (CLEP), and other testing programs. Students may call the Assessment Center for schedule information.

A free parking area is available in the west section of the parking lot at the corner of Haley and University (southwest corner of campus). A student-parking permit is required to park in all other parking lots. Student permits are available at the dispensers located in all parking lots.

Athletics 395-4266
The Bakersfield College Athletics Program started in 1922 and is known for its quality, its success and the sportsmanship of its students. Over the years former ‘Renegade’ student athletes, coaches and staff have returned to support the Athletic Program. Community support also plays an important role and is demonstrated by attendance at contests and by contributions from the community. This sense of ‘Renegade’ pride and loyalty contribute to the strong foundation of today’s Athletic Program. Today’s ‘Renegade’ student athletes might perform in a new sports complex for softball and baseball or in one of the premiere, community college stadiums for football and track. Both of these facilities are the result of and community and college support.

The philosophy of the Bakersfield College Athletics Program is to teach a student athlete to “act like a winner on and off the fields and courts of play.” Sportsmanship is expected of all student athletes. Student athletes are encouraged to achieve their potential as athletes, but also as well-rounded students and productive members of the community.

Bakersfield College is a member of the Western State Conference and is governed by the Commission on Athletics. Student athletes are supported in the Athletics Program by a dedicated coaching staff, certified trainers, equipment personnel, and an athletic educational advisor. Every effort is made to ensure compliance with the regulations of the Western State Conference and the National College Athletics Association.

Bakersfield College has over 300 Renegade student athletes annually. There are nine women’s sports which include basketball, cross country, golf, soccer, softball, swimming, tennis, track and field, and volleyball. The nine men’s sports include baseball, basketball, cross country, football, golf, swimming, tennis, track and field, and wrestling.

Career Center 395-4083
The Career Center is located in the Larry Robinson Counseling Center. The virtual Career Center website can be found at http://www2.bakersfieldcollege.edu/counseling/careercenter/. The Bakersfield College Career Center provides resources for assisting students in making career choices that match their interests and natural talents. Resources include self-assessments and career information. The Center is designed to meet the needs of all students depending upon where they are in the career development process.

Child Development Centers 395-4368
The Child Development Center (CDC) and state preschool provide a comprehensive early care and education program that serves college student families and their infant, toddler, and preschool age children, ages 6 months to 5 years. Placement in the program follows state guidelines to assign each family a priority rank based on income and family size. First priority enrollment is given to income eligible families with documented need for services who are Kern Community College District students working toward a specific profession or career goal. Our services support and assist student families to successfully complete their college courses and achieve their goals. In addition, the CDC provides demonstration/observation laboratory classrooms for college students majoring in child development, health careers, and other helping professions. Student interns can gain hands-on experience in our “best practices” classrooms working with children under the supervision and direction of our licensed teachers.

The centers are primarily funded through the California State Department of Education and are licensed through the California Department of Social Services. All teachers have professional training in child development/early childhood education and are certificated through the California Commission on Teacher Credentialing. Applications can be found at BakersfieldCollege.edu/student/cdc/. Click on Apply Now! then follow the instructions to drop off or mail in the completed application. Applications are not sanctioned. The program can assist these parents with work opportunities and other educational expenses related to attendance at Bakersfield College. CalWORKs also provides special services which include: academic, career, and personal counseling; workshops for academic success; work study; curriculum development and redesign; holiday celebration/spring picnic(s); awards/recognition ceremonies. The Bakersfield College CalWORKs Program additionally offers confidential liaison and advocacy between students, the college, the Department of Human Services and other community Agencies. For additional information on CalWORKs and eligibility to receive these services, please contact the CalWORKs Office. The CalWORKs Office is located in the Student Services Building, second floor (next to the Financial Aid Office).
are also available at the Child Development Center, Room 202, Monday through Friday from 8:00 a.m. to 4:00 p.m.

Computers for Student Use 395-4696
Use of the instructional computers by students at Bakersfield College is encouraged. Access to academic computing services is a privilege enjoyed by all students. The Computer Commons, located in the Library, is an open lab. Computers are also available in the Student Services Academic Use Area adjacent to EOPS. Student workers are available to assist students in the use of these computers.

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. For details of campus computer policies, see the Student Handbook.

Counseling Department 395-4421
The Counseling Department is located in the Larry Robinson Counseling Center. The Counseling Center website can be found at http://www2.bakersfieldcollege.edu/counseling/index.html. The Counseling Department is committed to promoting student success by assisting students with educational planning and strategies for navigating higher education and assistance with career choices.

Consultations
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 harm.

To talk with a counselor/advisor, please stop by the Counseling Center located in the Student Services Building or call (661) 395-4421. 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, 7:30 a.m. to 5:30 p.m., and Friday 8 a.m. to Noon.

Disabled Student Programs & Services (DSP&S) (Bakersfield College - 395-4334) Delano Campus (720-2000)
Disabled Student Programs & Services assists the college in providing equal access to educational opportunities for students with disabilities. Disabled Student Programs & Services provides reasonable accommodations to students with documented physical, communication, psychological, developmental, and learning disabilities who are enrolled in classes through Bakersfield College. The department provides accommodations and support services which may include, liaison with California State Department of Rehabilitation and other community resources, test taking assistance, special equipment, mobility assistance, note taking, assistive computer technology, special classes, sign language interpreters, written materials in alternate format, and learning disability assessment. These services are intended to prepare and support students to participate on an equal basis with their non-disabled peers. For college material in alternate format, contact Disabled Student Programs & Services.

ESL Tutoring 395-4570
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. To schedule an ESL tutoring session, call 395-4634.

Extended Opportunity Programs and Services (EOP&S) and Cooperative Agencies Resources for Education (CARE) 395-4351
The EOP&S Program is a state funded program that serves students from low-income and educationally disadvantaged backgrounds. Services include academic, career and personal counseling, peer mentoring, financial aid advising, scholarship information, transfer assistance, books and other support services. The EOP&S Program's primary goal is to encourage the enrollment, retention and transfer of students with educational disadvantages to facilitate the successful completion of their goals and objectives in college. Students must complete the Free Application for Federal Student Aid (FAFSA) to determine eligibility. The CARE component offers additional grants and/or services to full-time students who are single parents, TANF recipients, and have at least one child under the age of 14. CARE participants must qualify for financial aid. Services offered include peer mentoring, counseling, tutoring referrals, single-parent workshops, follow-up support and special events. For additional information on EOP&S/CARE and eligibility to receive these services, please contact the EOP&S/CARE Office. The EOP&S/CARE Office is located in the Student Services Building, second floor (next to the Financial Aid Office). EOP&S Service are also offered at the Delano Campus.

Financial Aid 395-4428
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 (SS 150). 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.

All students are encouraged to complete the Free Application for Federal Student Aid (FAFSA) at www.fafsa.ed.gov to be considered for the following programs.

Financial Aid Services are also available at the Delano Campus by personal contact or by phone at 725-2011.
Board of Governors Waiver (BOGW)
State supported program to waive the enrollment fees 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 TANF, SSI or General Assistance.

Cal Grant B
State funded grant for students from disadvantaged and low income families.

Cal Grant C
State funded grant for students enrolled in a vocational program.

Extended Opportunity Program and Services (EOP&S)
State funded program offering access and retention services including books for low-income, educationally disadvantaged students.

Cooperative Agencies Resources for Education (CARE)
State funded program offering supportive services and financial assistance for low-income, single parent EOP&S students.

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

Federal Direct Stafford Student Loans
Federally insured loans available from the Department of Education on long-term repayment plans.

Federal Supplemental Educational Opportunity Grant
Federal program which provides additional grant assistance for students with exceptional financial need.

Federal Work Study (FWS)
On-campus employment is available through Federal Work-Study, a federally funded program for students who can demonstrate financial need and enrollment in six or more units. Employment is used to fund college expenses.

Federal Direct Plus Loans
Loans for parents with good credit histories.

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.

Short-Term Loans
A limited number of loans are available for books and emergency needs, and must be repaid within 30 days at no interest.

Applications and full information concerning the above programs can be obtained by personal contact, by phone, or at BakersfieldCollege.edu/finaid/.

STUDENT HEALTH AND WELLNESS PROGRAM
CAMPUS CENTER 395-4336

Medical Services
The Student Health and Wellness Program (SHWP) Center provides diagnosis and treatment of a wide variety of general medical conditions. The services meet many student healthcare needs, including acute conditions such as fevers, respiratory illnesses, stomach pains, sprains and strains, skin rashes, and minor surgical procedures. The Center also treats and manages patients with chronic conditions such as asthma, diabetes and other diseases. Physicals, TB testing, and some vaccines are available free of charge. Students can access medical services free five times per semester.

Health-related literature and a variety of over-the-counter medications are available free of charge.

Mental Health Services
The Center offers services to address students’ mental health concerns. Students are eligible to receive six free one-hour short term counseling (talk therapy) sessions per semester. Group therapy self-improvement classes are also available.

The SHWP is located in the Campus Center (CC3). Clinic hours are Monday-Wednesday 7:30 a.m. to 5:30 p.m. and Thursday from 9:30 a.m. to 7:30 p.m. To schedule appointments for any services, come to the clinic or call 661-395-4336 to make an appointment. Walk-ins are also welcome.

M.A.P.S. (Mentoring and Peer Program Services)
The Student Health and Wellness program utilizes the expertise of students who are trained to provide educational programs and outreach. The peer education program known as MAPS (Mentoring and Peer Program Services) is made-up of students who serve as a resource, referral agents, and role models for other students.

Delano Campus
661-725-2788 (Mental Health) or 661-725-4780 (Medical)
Students at the Delano Campus receive free medical and mental health services from Clinica Sierra Vista. Delano Campus students can access MAPS services, free over-the-counter medication and health-related literature in the Delano Science and Technology Building.

Student health insurance coverage is available for campus-related injuries.

Job Placement Services 395-4450
The Job Placement Center assists students and alumni in finding both part and full-time jobs. The Center offers
Students and staff use their current Gades Card for library circulation privileges. Community members may also have circulation privileges with a payment of a one-time fee. Inquire at the circulation desk for details.

Library and Computer Commons Hours:
Monday – Thursday – 8 a.m. - 7:45 p.m.
Friday – 8 a.m. - 2 p.m.
Saturday – 11 a.m. - 3 p.m.
Summer Session and holidays as posted

MESA Center (Math, Engineering & Science Achievement) 395-4776
Bakersfield College’s MESA Community College Program (MCCP) Center, located in Science and Engineering, Room 46, is dedicated to serve underrepresented students in the fields of Mathematics, Engineering, and the Sciences, and plan to transfer to a four-year institution to complete a baccalaureate degree. MCCP requires attendance to at least nine MESA Orientation Workshops (MOW) for one semester. In addition, the program requires student involvement in one of the following activities per semester: Academic Excellence workshop; MOW; Professional, Career Development Seminars; or Capstone Projects. These workshops and activities provide students with critical problem solving techniques and practice in upper level coursework as well as exposure to career development in mathematics and science based fields.

MCCP offers students book vouchers, scholarships, stipends, free tutoring, field trips to four-year colleges and industries respective to students’ fields of study, industry internships, and an environment for studying and networking. Phone for information regarding MESA membership and the program: 661-395-4776.

MESA Center Hours:
Monday-Thursday – 7:30 a.m. - 10 p.m.
Friday – 8 a.m. - 12 p.m.
Website: www2.bakersfieldcollege.edu/mlc
Location: Science & Engineering, Room 46

Off-Campus Housing 395-4355
As a service to students seeking off-campus housing, the Student Activities Office keeps a listing of apartments and rooms for rent. Student Activities does not endorse any listings, however, both landlords and students are expected to live up to their respective obligations. These listings describe the facilities being offered and other pertinent information. Students interested in further information must visit the Student Activities Office, Campus Center 4 (CC4), 395-4355.

Student Activities, Clubs and Organizations 395-4355
The Student Government Association of Bakersfield College (SGA) is the student governing organization and has the major responsibilities for campus clubs, organizations and the student activities program in general. SGA is composed of
College Student Handbook, please stop by the Dean of College Student Handbook. For a copy of the Bakersfield Policies and Procedures may be found in the Bakersfield Copies of the Bakersfield College Student Conduct Code may be cause for disciplinary action. Failure to respect the standards as set forth by Bakersfield college community.

and students are expected to cooperate with all members of the conduct should reflect consideration for the rights of others, decency, morality, honesty, and social relationships. Student

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 Student Conduct Code Policies and Procedures may be found in the Bakersfield College Student Handbook. For a copy of the Bakersfield College Student Handbook, please stop by the Dean of

Student's Office located in Campus Center-4 or visit our Bakersfield College website: BakersfieldCollege.edu

Transfer Center
The Transfer Center offers resources and services to all students. The Center facilitates the transition of students from Bakersfield College to a baccalaureate college or university. The Center helps reduce the complexity of transferring by using articulation and transfer agreements, major preparation and application/ personal statement workshops.

Bakersfield College has guaranteed transfer admission agreements with UC Davis, UC Irvine, UC Merced, UC Riverside, UC San Diego, UC Santa Barbara, UC Santa Cruz and California State University Bakersfield. Admission advisors from CSUB are housed in the BC Counseling Center and regularly work with students to ease the transition between BC and CSUB. Other college representatives visit campus periodically and a current schedule can be found on the comprehensive Transfer website, BakersfieldCollege.edu/ transfer/

Transfer workshops are offered throughout the year. The Transfer Center maintains current catalog information for California public and private schools. Computers with access to online resources such as www.assist.org to help students with choosing major preparation courses for transfer to the CSU and UC universities are available. The Transfer Center is located in the Counseling Center, Student Services Building.

WorkAbility III 395-4070
In cooperation with the State Department of Rehabilitation (DOR), 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 Bakersfield College students who are also clients of DOR. In addition, DOR may provide financial aid which may cover the cost of fees, books and other services.

If a student with a disability believes he/she may qualify for services from DOR, the student can visit the DOR office at 1405 Commercial Way, Suite 120, Bakersfield, or call 395-2525. Eligible students are urged to apply for services from Disabled Student Programs and Services (FACE 16) at the beginning of the semester.

Veterans Services 395-4414
Bakersfield College is approved as an institution of higher learning for the training of veterans and veterans’ dependents entitled to educational assistance.
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. The Post - 9/11 Veterans Educational Assistance Act of 2008 (Chapter 33).
   c. Montgomery GI Bill - Selected Reserve Educational Assistance Program (Chapter 1606).
   d. VEAP (Chapter 32) - Contributory VEAP or Section 903 - Services beginning on or after January 1, 1977 through June 30, 1985.
   e. 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:
   a. 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.
   b. Chapter 33 benefits if the veteran elects to transfer benefits.

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 at Window 6 in the Office of Admissions and Records, Room A-7.
Academic Information and Standards
Academic Information and Standards

Academic Information

Academic Credit
Coursework is measured in terms of semester units. A "unit" equals 18 hours of lecture or 54 hours of lab work per semester in most courses. Lecture courses require additional outside of class work to equal a minimum of 48 hours of student work.

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.

Plagiarism and Cheating
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 a student a failing grade for the course, if the assignment or test for which the student cheated or plagiarized is of sufficient weight to merit a failing grade for the course. The student may face a range of sanctions 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.

**Academic Renewal**

A maximum of 20 units of substandard academic grades, (‘D’, ‘F’, ‘NC,’ and ‘NP’) 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 coursework to be disregarded was recorded.
2. At least 12 units of satisfactory coursework (2.0 GPA or higher) have been completed at Bakersfield College subsequent to the coursework to be alleviated.
3. The student completes an Academic Renewal request.
4. The student states in the request 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 coursework 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.

**Catalog Rights/Continuous Enrollment**

Bakersfield College students have the right to elect to meet the graduation requirements in effect during the academic year of first enrollment or at the time of graduation. To maintain catalog rights to graduation requirements, a student must remain in continuous enrollment at Bakersfield College. This means the student must earn a grade of A, B, C, D, F, NP, P, I, IP, RD or W in at least one course each academic year. For the purposes of continuous enrollment, an academic year begins with the fall semester and includes the following spring and summer terms. Petitions for exceptions should be directed to the Executive Vice President, Academic Affairs and Student Services.

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.

**Credits Allowed from Other Institutions**

Students who wish to receive Bakersfield College credits for work completed at other colleges should have official copies of transcripts from such colleges sent to the Office of Admissions and Records. Upon student completion of a Request for Evaluation in the Office of Admissions and Records, those transcripts will be reviewed and credit given where appropriate. Bakersfield College only accepts transfer credits from schools that are accredited by regional accrediting commissions of schools and colleges. Transcripts from foreign institutions must be evaluated by an approved international academic credential evaluation service. Information is available at the Office of Admissions and Records. Evaluations made and credits allowed by Bakersfield College are subject to review and evaluation by any college or university to which a student may transfer. Granting credit toward a Bakersfield College degree or certificate does not guarantee that pass through general education will be granted. (See CSU Gen. Ed. and IGETC sections.)

**Advanced Placement Program**

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 faculty chair. Additional information may be obtained from the Office of Admissions and Records.

Students may submit Request for Evaluation forms to the Office of Admissions and Records after they are enrolled in classes at Bakersfield College and they must have appropriate documentation of their successful completions of the Advanced Placement courses. A maximum of 30 units of credit by examination may be applied to the associate degree.

**Credit by Examination**

Subject to certain conditions, students may submit Request for Evaluation forms to the Office of Admissions and Records after they are enrolled in classes at Bakersfield College and they must have appropriate documentation of their successful completions of the credit by examination. 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.
for which a fee equal to the current enrollment fee will be charged. Information on the policy and request for credit by examination forms may be obtained from the Office of Admissions and Records.

When a CLEP exam exists that has been approved by the appropriate dean for credit as a specific course or courses in the current college catalog, department administered exams will not be used to award credit in that specific course. A list of the courses for which CLEP tests are approved is available in the Office of Admissions and Records and in the Assessment Center. The College can provide no assurance that credits awarded for credit-by-examination will be treated in a similar manner by other educational institutions.

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.

**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 faculty 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, Room A-7.

Students may submit Request for Evaluation forms to the Office of Admissions and Records after they are enrolled in classes at Bakersfield College and they must have appropriate documentation of their successful completions of the College Level Examination courses. 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 veterans from 2 to 12 elective credits for specific service experience and certain educational training 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.

Students may submit Request for Evaluation forms to the Office of Admissions and Records after they are enrolled in classes at Bakersfield College and they must have appropriate documentation of their successful completions of the military courses.

**TECH PREP Program**
Bakersfield College TECH PREP Program is an integral part of Career and Technical Education, and encourages high school students to continue education training at the college level by offering college credit for high school articulated courses. It provides a smooth transition from high school to a certificate, associate degree or transfer at the community college without the need to repeat articulated courses. Bakersfield College currently has articulation agreements with high schools, ROCP and adult schools.

Bakersfield College will award credit-by-exam credit to students who have completed and met the competency requirements of an articulated course, are currently registered and in good standing at the college, and only for the course listed in the college catalog. See your high school counselor to obtain a list of courses that are currently articulated at your school or check out our TECH PREP website at: www2.bakersfieldcollege.edu/techprep/articulation.html. Additional information can be obtained from the Office of Career and Technical Education.

**Repeating a Course**
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. Only second attempts will replace the first substandard grade. The original and subsequent grades will remain a part of the student’s permanent record.
If a student earns any combination of “D,” “F,” or “W” on two attempts in a course taken in the Kern Community College District, that student can only register for a third time with the signature of the faculty chair of the department on a Request to Repeat a Course Beyond the Limit form.

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

**Grades and Credits**

**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.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-Excellent</td>
<td>4 per unit</td>
</tr>
<tr>
<td>B-Good</td>
<td>3 per unit</td>
</tr>
<tr>
<td>C-Satisfactory</td>
<td>2 per unit</td>
</tr>
<tr>
<td>D-Failing</td>
<td>1 per unit</td>
</tr>
<tr>
<td>AU-Audit</td>
<td>0 per unit</td>
</tr>
<tr>
<td>P-Pass</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>NP-No Pass</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>I-Incomplete</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>W-Withdrawn</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>IP-In Progress</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>RD-Report Delayed</td>
<td>Not computed in GPA</td>
</tr>
</tbody>
</table>

**AU-Audit**
This grade is issued to students who enroll in classes in an audit status. It will not count in GPA.

**Pass-No Pass**
Some courses are offered on a pass-no pass basis; the credit, no credit option will no longer be available. Upon successful completion of such a course, unit credit will be awarded. However, courses taken on a pass-no pass 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 pass-no pass 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 pass-no pass basis. Exceptions to this rule may be made by the Dean of Students in cases involving Nursing, Radiologic Technology, and special remedial programs.
3. In courses in which pass-no pass is authorized, the pass grade is granted for performance which is equivalent to the letter grade of “C” or better.
4. Combination classes (pass-no pass or grades) must have an A, B, C, D, F and pass-no pass system.
5. Petitions for pass-no pass 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 pass-no pass or a letter grade, he/she may not elect to change after the established deadline.
7. Courses in which pass-no pass 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.

Pass-no pass forms are available in the Office of Admissions and Records. The following courses are approved for pass-no passing:

- **ACDV** B5a, B66, B68, B70a-f, B91, B190, B195, B201a, B201b, B292; **ADMJ** B60, B61, B63, B81; **ANSC** B11, B71, B78; **APPR** B60cs, B60ec, B60fa, B60fb, B60pe, B60pt, B65xf; **ART** B1, B2, B4, B17; **AUTO** B67abc, B68, B106, B112; **BIOL** B255; **BSAD** B1, B2, B18, B19, B57, B250, B255; **CADM** B54, B55, B56, B57, B58, B70a, B70b, B70c, B70d, B70e, B70f, B70g, B70h, B70i, B70j, B70k, B70l, B70m, B70n, B70o, B70p, B70q, B70r, B70s, B70t, B70u, B70v, B70w, B70x, B71a, B71f, B71g, B71h, B71i, B71k, B71l, B71m, B71n, B71o, B71p, B71q, B72, B73, B74, B75, B76, B77, B78, B79; **CHDV** B70b, B70e, B70f, B71m; **COMS** B2, B3, B5, B10, B14, B27, B35, B40, B51, B52a, B57a, B62a, B73, B74a, B74b, B74c, B74e, B74f, B75c, B76b, B77, B78, B82, B92, B95, B96, B110, B201; **CRIM** B1, B2, B3, B4, B5, B8, B9, B10, B55; **EDUC** B24, B78, B79; **ELET** B1, B4, B5, B5a, B5b, B5b, B61, B62, B63, B70; **ENGL** B34, B60, B255; **ENSL** B22, B50, B51, B56, **ENSX** B61, B70, B71ab, B71cd, B80, B300N, B301N, B302N, B303N, B304N; **FDIV** B71; **FIRE** B1, B2, B3, B4, B5, B6, B7, B25f, B25h, B29, B71a, B72h; **GEOL** B35a, B35b; **INDT** B10, B51, B274; **JAPN** B3, B52a; **LIBR** B34, B55; **MATH** B24, B25, B255; **MEDS** B52, B65, B66; **MEGF** B4; **MUSC** B5ab, B20ma, B230abc; **NURS** B52, B70, B112, **NURS** B100, B201abcd, B252, B253, B254, B255; **NUTR** B255; **ORNH** B2; **PHED** B2dwr, B2ssf, B2wp, B2xsd, B3adp, B6bad, B6da, B6dm, B6dx, B6fx, B66, B6py, B6s, B6sa, B6sf, B6si, B6, B6w, B6y, B7fb, B7w, B9t, B9tr, B32, B44b, B44so, B44vb; **PHIL** B7, B255; (Philosophy majors may not take Philosophy courses for Pass/No Pass grading); **RADT** B4a, B4b, B6, B7, B10, B13; **REAL** B58, B70a; **SPST** B48, B201/B201L; **STDV** B1, B2, B3, B6, B60; **VESL** B82, B83, B84; **WOOD** B1, B2, B5, B65a, B65b; **WEXP** B250

**I-Incomplete**
Students may request that instructors issue “I” grades when they have an unforeseeable emergency and justifiable reasons...
at the end of the term. 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, P, or NP) 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.

Grade Reports
Final grades will be made available to students on the Bakersfield College web registration system as soon as possible after the end of each academic term. There will be no additional notification of grades completed or corrected.

Grade Changes
The instructor of each course shall determine the grade to be awarded to each student. The determination of the student’s grade by the instructor shall be final in the absence of mistake, fraud, bad faith, or incompetence. A judgment to change or expunge a grade for reasons of fraud, bad faith, or incompetence shall be made by the appropriate Vice President after consultation with the student, the instructor, and the Department Chair. All parties shall be notified in writing of any changes. Reasons for any grade change shall be documented.

Honors
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 earned from enrollment in Bakersfield College courses. Students whose academic achievement is at this level are placed on the Dean’s List by the Office of Academic Affairs and Student Services 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:

<table>
<thead>
<tr>
<th>Grade Point Average</th>
<th>Honor Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.50 - 3.69</td>
<td>Cum laude</td>
</tr>
<tr>
<td>3.70 - 3.89</td>
<td>Magna cum laude</td>
</tr>
<tr>
<td>3.90 - 4.00</td>
<td>Summa cum laude</td>
</tr>
</tbody>
</table>

Phi Theta Kappa Honor Society
Phi Theta Kappa membership is based on academic achievement. Students must be enrolled in a regionally accredited institution offering an associate degree program. They must complete a minimum of 12 hours of coursework leading to an associate degree, must generally have a 3.5 grade point average, and must enjoy full rights of citizenship. After induction, members must maintain a GPA of 3.3 or higher. There is a fee for membership in this organization. Contact Jason Stratton at 395-4071 for more information.

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 Program. Honorariums of $100 per semester, based exclusively on meeting the program’s criteria each semester, are made available to President’s Scholars. Contact the Dean of Student’s Office located in CC-4 at 395-4614.

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 an honorarium award of $100 per semester. An explanation of eligibility requirements and information about the program are available in the Dean of Students’ Office located in CC-4 at 395-4614.
Graduation and General Education
CERTIFICATES AND DEGREES OFFERED AT BAKERSFIELD COLLEGE

Students have many different goals in mind when they enroll at Bakersfield College. Some plan to earn a certificate to enhance their job skills while others want to earn a two-year degree and/or transfer to a four-year university. Bakersfield College offers the following certificate and degree programs:

- Associate in Arts and Associate in Science degrees can be used to obtain necessary skills for a range of possible careers or they may be used to transfer to a four-year institution.
- Certificates of Achievement are awarded to students who complete formal instructional programs of at least 18 units designed to prepare them for a specific field or endeavor.
- Job Skills Certificates are awarded upon the satisfactory completion of coursework (less than 18 units) in a specific area of study.

Each of the degrees requires students to meet all graduation and general education requirements. Students who plan to seek immediate employment rather than to transfer usually choose to meet the Bakersfield College General Education Requirements.

Students who wish to transfer to a four-year school select the California State University General Education Breadth to transfer to a California State University or the Intersegmental General Education Transfer Curriculum (IGETC) to transfer to either a University of California Campus or a California State University Campus.

Graduation with an Associate Degree

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 capability 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)

The associate in arts or the associate in science degree shall be conferred by the Board of Trustees of the Kern Community College 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.

Applying for Graduation

Students must complete candidacy for graduation requests at the beginning of the semester in which they plan to graduate. Applications are available in the Counseling Center, Disabled Student Programs and Services Office and EOP&S Office. Students must verify their eligibility to graduate with a counselor or academic advisor and obtain a what-if degree audit to submit with the petition. Filing periods for graduation candidacy requests are:

- August 1 through November 1 for December graduation
- January 1 through April 1 for May graduation
- June 1 through July 1 for August graduation

The Office of Admissions and Records notifies students who do not qualify within twelve weeks of submission of the graduation application. Students who do not receive such notification should assume that they will graduate if they satisfactorily complete their current term courses. Students who qualify will receive their diploma in the mail approximately eight weeks after the end of the semester. Duplicate diplomas can only be issued upon written request and upon payment of a replacement fee.

Commencement Ceremonies

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. Students planning to complete during the following summer must:

- file a candidacy request between April 1 and May 1
- need only one course or less than five units for completion
- submit documentation of registration for the required course(s)

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 B1
   Allied Health: NURS B100
   Applied Science and Technology: INDT B10
   Business: BSAD B20
   Education: EDUC B24
   FACE: FDSV B50
   Foreign Language: ENSL B11
   Physical Science: ARCH B1; ENGR B47
   Student Development: STDV B1, B2, B3, B4, B6

2. Minimum of 60 degree applicable units, with at least a 2.0 grade point average.

3. At least 12 of the 60 units must be completed with Bakersfield College.

4. Completion of the required courses of a designated major.
5. Competency Requirements:
   a. Composition: completion of English B1a with a minimum grade of “C.”
   b. Mathematics: Two years of high school algebra or MATH BD 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 or a satisfactory grade in ACDV B50.

6. Completion of a General Education Pattern: Choose 1: Bakersfield College General Education Specific Requirements, or California State University General Education Breadth, or Intersegmental General Education Transfer Curriculum. (See General Education Requirements).

7. Completion of one course meeting the Multicultural Requirement.

**Multicultural Requirement**
Multicultural study promotes awareness of and sensitivity to diverse beliefs and practices in contemporary society. 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 the distinctive cultures of the United States or the world, including but not limited to ethnicity, gender, class, political systems, religions, or human geography.

*American Cultural and Ethnic Groups:* 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: African Americans, Native Americans, Asian Americans, Chicano/Latino Americans, and European-Americans from integrative and comparative viewpoints as they relate to the larger context of American history, society and culture.

*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 not be based solely on western civilization.

**Double Majors**
A single associate degree which designates graduation 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 for the academic year. 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 Executive Vice President, Academic Affairs and Student Services. 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.

Institutional Level Learning Outcomes
Upon completion of an Associate’s Degree, a student will:

I. Pursue knowledge and evaluate its consequences
   A. Think critically, abstractly, logically, and algorithmically to evaluate and solve problems.
   B. Integrate new information to formulate principles and theories and display openness to different opinions.
   C. Share the desire for intellectual creativity and acquisition of knowledge.
II. Communicate clearly and effectively in both written and oral forms.
III. Demonstrate knowledge and abilities in a chosen area of study.

   A. Demonstrate an understanding of resources and procedures of a field and the ability to use them.
   B. Demonstrate the ability to use current technology to acquire, organize, and analyze information appropriately.
   C. Possess a core of knowledge and skills in a chosen field.
IV. Appreciate their civic responsibilities.
   A. Reflect upon the cultural and ethical dimensions of life.
   B. Contribute to society as an actively engaged citizen.

General Education Student Learning Outcomes
A.1. Oral Communication
1. Form and present informative persuasive messages.
2. Demonstrate competence in both active and emphatic listening.
3. Present oral messages to appropriate audiences and adhere to conventions of message delivery.
4. Manage personal communication apprehension and anxiety.

A.2. Written Communication
1. Identify the controlling idea and the main points of college-level expository and argumentative essays.
2. Evaluate expository and argumentative essays through the application of critical thinking techniques.
3. Write logical and coherent expository and argumentative essays, summaries and paraphrases using correctly the standard conventions of written English.

B.1. Natural Sciences
1. Demonstrate a knowledge of natural phenomena and recognize the processes that explain them.
2. Demonstrate a knowledge of scientific methodologies when solving a problem.

B.2. Mathematics and Logic (Analytic Thinking)
1. Apply formal systems of reasoning in solving problems or analyzing arguments.

C.1. Introduction to the Arts
1. Demonstrate an understanding of and an ability to describe the ways in which arts, literature, philosophy or foreign languages reflect historical, intellectual, and cultural contexts, as well as aesthetic tastes.
2. Demonstrate the ability to recognize, describe and/or produce various components of an art form or language either visually and/or auditorily.

C.2. Introduction to the Humanities
1. Demonstrate an understanding of and an ability to describe the ways in which arts, literature, philosophy or foreign languages reflect historical, intellectual, and cultural contexts, as well as aesthetic tastes.

D.1. Foundations in the Behavioral Sciences
1. Demonstrate an understanding of the perspectives, theories, methods and core concepts of the behavioral sciences.
2. Explain the major problems and issues in the disciplines in their contemporary, historical and geographical contexts.
3. Demonstrate an understanding of and an ability to describe the contributions and perspectives of women, ethnic and other minorities, and Western and non-Western peoples.

D.2. Foundations in the Social Sciences
1. Demonstrate an understanding of the perspectives, theories, methods, and core concepts of the social sciences.
2. Explain the major problems and issues in the disciplines in their contemporary, historical and geographical contexts.
3. Demonstrate an understanding of and an ability to describe the contributions and perspectives of women, ethnic and other minorities, and Western and non-Western peoples.

D.3. American (U.S.) Institutions
1. Demonstrate an understanding of the perspectives, theories, methods, and core concepts of the social sciences.
2. Explain the major problems and issues in the disciplines in their contemporary, historical and geographical contexts.
3. Demonstrate an understanding of and an ability to describe the contributions and perspectives of women, ethnic and other minorities, and Western and non-Western peoples.

E. Lifelong Understanding and Self-Development
1. Critically examine the development of the individual as an integrated physiological, psychological, spiritual, and social being.
2. Identify, describe and explain the interactions of the internal and external influences and effects in human development and behavior over the course of the human life span.
A. Communication in the English Language and Critical Thinking (6 units). Courses in language and rationality are those which develop for the student the principles and applications of language toward logical thought, clear and precise expression, and critical evaluation and communication. Take 3 units in A.1 and 3 units in A.2.

A.1. Oral Communication (3 units)
COMM B1, B2, B4, B8.

A.2. Written Communication (3 units)
ENGL B1a

B. Physical Universe and Life Forms (6 units). Courses in the natural sciences are those that examine the physical universe, its life forms, and its natural phenomena. Further, courses in the natural sciences help the student develop an appreciation and understanding of the scientific method. Courses in the natural sciences, math and logic help students apply logical, qualitative and quantitative reasoning in solving problems or analyzing arguments. Take 3 units in B.1 and 3 units in B.2.

B.1. Natural Sciences (3 units)
Life Sciences:
ANTH B1
BIOl B3a, B7, B11, B16, B18, B20, B32, B33
CHEM B49
CRPS B1, B3, B10
FORE B2
PSYC B1b
SOIL B1

Physical Sciences:
ASTR B1, B2, B3
CHEM B1a, B2a, B11
ERSC B10; B10L
GEOG B1, B1L, B2*, B3
GEOL B10, B10L, B11, B11L
PHSC B12
PHYS B2a, B4a.

B.2. Mathematics and Logic (Analytical Thinking) (3 units)
COMM B5
ENGR B19f
MATH B8, BD, B1a, B1b, B2, B4a, B6a, B6b, B16, B21, B22, B23
PHIL B7, B9
PSYC B5, B6

C. Arts, Literature, Philosophy and Foreign Language (3 units). Courses in the Arts, Literature, Philosophy and Foreign Language are those which study the cultural activities and artistic expressions of human beings. The courses will help the student develop an awareness of the ways in which people throughout the ages and in different cultures have responded to themselves and the world around them. Art and language study may consist of historical or stylistic survey courses, courses involving speaking (signing) and understanding a language, hands-on creation or re-creation of examples of visual or performing arts, and/or courses which develop specific skills necessary for engaging in visual or performing arts.

ART B1, B2, B4, B5, B10, B16, B17, B20, B24, B35, B36, B37*
ASL B1, B2, B3, B4, B7
CHST B30e
COMM B21
ENGL B1b, B5a, B5b, B10, B20a*, B21, B23, B27, B30a, 30b, B35
ENSL B31
FREN B1, B2, B3, B4
GERM B1ab, B2
JAPN B1, B2, B3
ORNH B36
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, B10, B12, B18, B32, B33, B37*
RUSS B1ab
THEA B1, B2ab, B4, B12a, B20, B27, B28, B30, B31, B32, B227, B228.

D. Social, Political, Legal and Economic Institution and Behavior, Historical Background (9 units for AA; 6 units for AS). Courses in the social and behavioral sciences are those which focus on people as individuals and as members of society. The courses will help the student develop an understanding of the methods of inquiry used by the social and behavioral sciences. For an AA Degree, choose 6 units from D.1 and/or D.2 and 3 units from D.3. For the AS Degree, take 3 units from either D.1 or D.2 and 3 units from D.3.
D.1. Foundations in the Behavioral Sciences

- BSAD B5
- CHDV B21
- COMM B6*
- CRIM B1, B5
- PSYC B1a, B20 (SOCI B20), B33, B40
- SOCI B20 (PSYC B20)

D.2. Foundation in the Social Sciences

- AGRI B1, AGBS B2
- ANTH B2*, B3, B5*
- BSAD B20, B40
- CHST B30a*(HIST B30a*), B36* (SOCI B36*)
- COMM B7
- CRIM B12
- ECON B1, B2
- GEOG B2*
- HIST B1, B2*, B3*, B4a*, B4b*, B15, B17a*, B17b*, B18*, B20a*, B25*, B30a*(CHST B30a*)
- B33* (CHST B33); B36
- JRNL B1*
- POLS B1*, B2*, B3*, B12*, B16
- PSYC B20 (SOCI B20)
- SOCI B1*, B2, B20 (PSYC B20), B28*, B36*

D.3. American (U.S. Institutions)

- CHST B30b (HIST B30b)
- HIST B3*, B4a*, B4b*, B17a*, B17b*, B18*, B20a*, B20b, B30b*(CHST B30b*), B33* (CHST B33); B36*
- POLS B1*, B12*

E. Lifelong Understanding and Self-Development

(4 units). Courses in this area will prepare students for lifelong integrated physiological and psychological development. Take 3 units from one of the following courses:

- HLED B1
- NUTR B10
- MEDS B35, or completion of an approved Allied Health Program (RN, Rad T, or LVN).
- PSYC B1a, B33
- STDV B6

No more than one unit of activity/skills course work may be used to satisfy the Area E requirement. Take 1 unit from the following PHED courses:

- PHED B2sb, B3adp, B6a, B6bb, B6blb, B6da, B6fcx, B6jd, B6kx, B6md, B6pf, B6pl, B6py, B6sc, B6t, B6v, B6vi, B6wt, B6y, B10, B11, B12, B13, B14, B16, B17, B20, B22, B23, B24, B25, B26, B27, B28, B29, B32, B33, B49

*Course satisfies the Multicultural Requirement.

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. **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, B5
- ART B37
- CHST B30a (HIST B30a), B30b (HIST B30b), B33 (HIST B33), B36 (SOCI B36)
- COMM B6
- ENGL B20a
- GEOG B2
- HIST B2, B3, B4a, B4b, B17a, B17b, B18, B20a, B25, B30a (CHST B30a), B30b (CHST B30b), B33 CHST B33), B36
- JRNL B1
- MUSC B24
- PHIL B37
- POLS B1, B2, B3, B12
- SOCI B1, B2, B20 (CHST B36), B45

The following non-general education courses also satisfy the Multicultural Requirement: ASL B6; CHDV B32.

**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 students carefully examine the available options.

Two of the primary choices for general education are the California State University (CSU) General Education Breadth 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 Bakersfield College 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.

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 6th College at UCSD do not guarantee acceptance of IGETC).

**Disadvantages:** Limited choice of courses.

**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.

Some UC majors are very intensive in lower division requirements, therefore general education requirements and patterns are modified or moved to upper division. A student should consult with a Counselor, especially science and engineering majors.

**Note:** Students may transfer a maximum of 70 community college transferable units to the University of California and California State University campuses.

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 entire areas will be certified.

Students are strongly advised to complete all areas of the pattern at Bakersfield College. 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.

“Double counting” of courses for general education-breadth, major requirements, and prerequisites may be done by the CSU campus. However, “double counting” is not permitted on CSU Breadth certifications.

Pass Along Certification

Students who transfer credits from another California community college often want to “pass along” the general education certifications that they have earned. Any California community college may certify such coursework from another California community college, from an independent institution that participates in certifying general education coursework to the California State Universities, and from a CSU campus. This can be done *only if the courses are on the approved certification list at the college where they were completed.* Such courses will be certified in the General Education Breadth area that is shown on the official certification list for the institution at which the courses were taken.

Students may request pass along certification when requesting final transcripts for their designated transfer CSU institution. Additional regulations for pass along certification include:

- 24 units must be completed before partial certification will be done
- 39 units must be completed before full certification will be done.
• Bakersfield College students who have not completed certification requirements may request evaluation of transcripts from accredited California, out-of-state, foreign, private or public colleges and universities.

C-ID Course Identification Numbering System
C-ID is a supranumbering system being developed to ease the transfer and articulation burdens in California’s higher educational institutions. Each C-ID number identifies a lower-division, transferable course commonly articulated between the California Community Colleges and the Universities of California and the California State Universities, as well as with many of California’s independent colleges and universities.

ASSIST
ASSIST is a web-based articulation and transfer planning system that can be accessed at www.assist.org. It describes 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.
California State University General Education Breadth Course List.

A. English Language Communication 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. AP credit may not be used for A.3.

A.3. Critical Thinking: PHIL B7, B9; ENGL B1b, B2 or COMM B5.

B. Scientific Inquiry and Quantitative Reasoning: A minimum of nine semester units including instruction in physical (B.1) and life science (B.2) and instruction in math/quantitative reasoning (B.4). One of the two science courses from B.1 or B.2 must include a lab. Courses with a lab are shown with an asterisk (*) and separate lab courses are listed in B.3. Students must complete Area B.4 with a grade of “C” or higher.

B.1. Physical Universe: ASTR B1, B2, B3
     CHEM B1a*, B2a*, B11*, B18*
     ERSC B10
     GEOG B1, B1L*, B3
     GEOL B10, B10L*, B11
     PHYS B2a*, B4a*
     PHSC B12*

B.2. Life Science: ANTH B1
     BIOL B3a*, B3b*, B7*, B11*, B16*, B18*, B20*, B32* B33*
     CRPS B10*
     PSYC B1b

B.3. Laboratory activity. At least one course shown with an asterisk (*) in Areas B.1 or B.2 or one of the following:
     ERSC B10L
     GEOG B1L
     GEOL B10L, B11L
     Courses from B.1 and B.2 with an * also satisfy the B.3 lab requirement.

B.4. Mathematics/Quantitative Reasoning: ENGR B19f
     MATH B1a, B1b, B2, B6a, B6b, B6c, B6d, B6e, B16, B22, B23, PSYC B5.

C. Arts and Humanities: 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, B2
     B4, B13, B35, B36, B37
     DANC B6bLb, B6jd, B6md
     MUSC B2, B4a, B4b, B21a, B21b, B22, B23, B24, B27
     THEA B1, B2a, B2b, B4, B12a, B20, B27, B31, B32, B227.

C.2. Humanities: (Literature, Philosophy, Foreign Languages): ASL B1, B2, B3
     ENGL B1b, B5a, B5b, B10, B20a, B21, B23, B27, B28, B30a, B30b, B35
     FREN B1, B2, B3, B4
     GERM B1ab, B2
     HIST B1, B15, B18
     JAPN B1★, B2★
     PHIL B6a, B9, B10, B12, B18, B32★, B33, B37★;
     RUSS B1ab
     SPAN B1ab, B3, B4, B10.

D. Social Sciences: 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.2. Economics: AGBS B2
     ECON B1, B2.
D.3. Ethnic Studies: ANTH B5
     CHST B30a, B30b, B33, B36
     COMM B6
     HIST B20a, B20b, B30a, B30b, B33, B36
     SOCI B28★, B36, B45.
D.4. Gender Studies: ENGL B23
     HIST B25
     SOCI B28★.
D.6. History: CHST B30a, B30b, B33
     HIST B1, B2, B3, B4a, B4b, B15, B17a, B17b, B18, B20a, B20b, B25, B30a, B30b, B33, B36.
D.7. Interdisciplinary Social or Behavioral Science:
     AGRI B1
     CHDV B21
     COMM B6, B7.
D.8. Political Science, Government, and Legal Institutions:
     JRNL B1
     POLS B1, B2, B3, B12, B16.
D.9. Psychology: PSYC B1a, B20 (SOCI B20), B40
D.10. Sociology and Criminology: CHST B36
     CRIM B1, B5
     SOCI B1, B2, B20 (PSYC B20), B28★, B36, B45.

E. Lifelong Learning 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.
     CHDV B21
     FORE B2
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 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.

IGETC Course List
*Courses may be listed in more than one area, but shall not be certified in more than one area except for courses in Languages Other Than English, which can be certified in both areas 3B and 6A. All courses must be completed with a “C” grade or better.

**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 group. 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. AP credit may not be used.
ENGL B2
PHIL B9.

Group C: Oral Communication: one course, three semester/four to five quarter units.
COMM B1, B2, B8.

Area 2. Mathematical Concepts and Quantitative Reasoning: one course, three semester/four to five quarter units.
MATH B1a, B1b, B2**, B6a**, B6b, B6c, B6d, B6e, B22**, B23
PSYC B5.

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.

A. ARTS: ART B1, B2, B4, B35, B36, B37
MUSC B2**, B4a, B4b, B21a*, B21b, B22, B23, B27
THEA B12a**, B20, B31, B32**.

B. HUMANITIES: ASL B2*, B3*
CHST B30a*, B30b*, B33*
GRADUATION AND GENERAL EDUCATION

ENGL B1b, B5a, B5b, B10, B20a, B21, B23, B27, B28, B30a, B30b
FREN B2*, B3*, B4*
GERM B2*
JAPN B2*
MUSC B24
PHIL B1ab, B5a, B5b, B10, B18, 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, B3, B5
CHDV B21
CHST B30a*, B30b*, B33*, B36
COMM B6
ECON B1, B2
GEOG B2
JRNL B1
POLS B1, B2, B3, B16
PSYC B1a**, B20, B40
SOCI B1, B2, B20, B28, B36, B45.

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).

A. PHYSICAL SCIENCES:
ASTR B1, B2, B3
CHEM B1a(L), B2a(L)**, B11(L), B18(L)
ERSC B10, B10(L)
GEOG B1, B1(L), B3
GEOL B10**, B10(L)**, B11**, B11(L)**
PHYS B2a(L)**, B4a(L)**.

B. BIOLOGICAL SCIENCES:
ANTH B1
BIOL B3a(L), B3b(L), B7(L), B11(L), B16(L), B20(L)
B32 (L), B33(L)
CRPS B10(L)
PSYC B1b.

Area 6. Language Other Than English (LOTE). 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, B2*, B3*, B4
FREN B1, B2*, B3*, B4*
GERM B1ab, B3*, B4*
JAPN B1, B2*
RUSS B1ab;
SPAN B1ab, B2ab, B3*, B4*, B10*.

CSU Graduation requirement in United States History, Constitution, and American Ideals
(Not part of IGETC; may be completed prior to transfer.)

Students who wish to meet this requirements at Bakersfield College prior to transferring to a campus of the CSU may take up to six semester units from the combinations below.

POLS B1 and one of the following: HIST B17a, B17b, B20a, B20b, B30a (CHST B30a), B30b (CHST B30b), B36
or
HIST B17a and POLS B1 or POLS B12 or HIST B18

Note: Courses used to satisfy this requirement may not be used to satisfy requirements for IGETC. Please consult with a counselor for additional information.
Programs
Certificates
and
Degrees
Listed below are Job Skills Certificates, Certificates of Achievement and Degree Programs which Bakersfield College currently offers. Suggested courses of study that may be found in the catalog are indicated by (JSC), (CA), (AA), (AS) or (AA-T). A* indicates that the student must consult the appropriate department chair for further information. Job Skills Certificates (less than 18 units) document the satisfactory completion of training in a specific area of study. Certificates of Achievement (18 units of study or more) are awarded for the completion of a formal instructional program which is designed to give the learner skills, knowledge, and attitudes for a specific field or endeavor.

To apply for any certificate, students must have earned at least 3 credits of the courses required for the certificate at Bakersfield College. Upon completion of the requirements for a certificate, the student contacts the academic department to complete an application for a Certificate of Achievement or a Job Skills Certificate. Certificates are issued by the department 6-8 weeks after the receipt of the application. Only Certificates of Achievement will be posted to transcripts.

**JSC (Job Skills Certificates)**  
**CA (Certificate of Achievement)**  
**AA (A.A. Degree)**  
**AS (A.S. Degree)**  
**AA-T (A.A. Transfer Degree)**

### Agriculture
- Agriculture Business Management (CA, AA, AS)
- Animal Science (CA, AA, AS)
- Environmental Horticulture (CA, AA, AS)
- Forestry (CA, AA, AS)
- Horticulture (AA)
- Plant Science (CA, AA, AS)
- Registered Veterinary Technician (JSC)

### Air Conditioning, Heating & Refrigeration (JSC)

### American Sign Language (AA)

### Anthropology (AA)

### Apprenticeship
- Carpentry (CA, AA*)
- Electrician (CA, AA*)
- Operating Engineers (CA, AA*)
- Plumbers & Steamfitters (CA, AA*)
- Sheet Metal (CA, AA*)

### Architecture
- Architectural CAD (JSC)
- Architecture Drafting (AA)
- Architecture/Architectural Drafting (AS)

### Art (AA) – see also Digital Arts

### Automotive
- Auto Brakes & Wheel Alignment (CA)
- Auto Engine Overhaul (CA)
- Automotive Heating, Ventilation and Air Conditioning-HVAC (JSC)
- Auto Tune-up and Emission Systems (CA)
- Automotive Power Trains (CA)
- Basic and Advanced Clean Air Car Course (JSC)
- Industrial Technology, Automotive Option (AS)

### Biology (AS)

### Business Administration
- Accounting (AA)
- Administrative Office Assistant (AA)
- Bookkeeping (CA)
- Business Administration (AA)
- General Business (JSC)
- General Management (JSC)
- Marketing (CA, AA)
- Office Assistant (JSC, CA)
- Real Estate (CA, AA)
- Retail Management (CA)

### Cabinetmaking - see Woodworking

### Chemistry (AS)

### Chicano(a)/Latino(a) Studies (AA)

### Child Development
- Child Development & Family Relations (AS)
- Child Development Teacher (CA)
- Child Development Assistant Teacher (JSC)
- Child Development Associate Teacher (JSC)
- Child Development Master Teacher: Infant Toddler (CA)
- Child Development Master Teacher: Special Education (CA)

### Communication (CA, AA, AA-T)

### Computer Studies
- Computer Information Systems (CA, AA, AS)
- Computer Science (CA, AS)
- Web Development: Design Emphasis (CA, AS)
- Web Development: Web Programming Emphasis (CA, AS)
- Web Development: Cross Discipline (CA, AS)

### Construction Technology (CA)
- Industrial Technology, Construction Option (AS)

### Correctional Administration (AA)
Criminal Justice (AA)

Digital Arts (CA, AA)

Economics (AA)

Electronics Technology (CA)
   Industrial Technology Electronics Option (AS)

Emergency Medical Technology Program, EMT-1 (JSC)

Engineering (AS)

Engineering Technology (AS)

English (AA)

Fire Technology
   Fire Technology (CA, AA, AS)
   Chief Officer Certification, Nfpa Standard 1021 (CA)
   Fire Officer Certification Nfpa Standard 1021 (CA)
   Wildland Fire Technology (AS)

Foods/Nutrition
   Food Service Management (AS)
   Child Nutrition Management Program (CA, AS)
   Culinary Arts (CA, AS)
   Dietetic Services (CA)

French (AA)

Geology (AS)

History (AA)

Human Services (JSC, AA, AS)

Industrial Drawing (AA)
   AutoCAD (JSC)
   Industrial Technology, Industrial Drawing Option (AS)

Industrial Technology (General) (AS)

Journalism (AA)

Liberal Arts (AA)

Liberal Studies (AA)

Manufacturing Technology (CA)
   Basic Machine Tool Operations-Lathe, Mill (JSC)
   Computer Numerical Control Programming (JSC)
   Control Systems Technology (CA, AS)
   Industrial Technology: Manufacturing Technology (AS)

Mathematics (AA)

Music (AA)

Nursing, Registered (AS)
   Nurse Assistant (JSC)
   Vocational Nursing (CA)

Philosophy (AA)

Physical Education (AA)

Physics (AS)

Political Science (AA)
   Political Science, Emphasis in International Relations (AA)
   Political Science, Emphasis in Domestic Policy (AA)

Psychology (AA-T)

Radiologic Technology (AS)
   Principles of Fluoroscopy (JSC*)
   Principles of Venipuncture (JSC*)

Sociology (AA-T)

Spanish (AA-T)

Theatre Arts (AA)

Welding (CA)
   Blueprint Reading & Layout for Welders (JSC)
   Gas Metal Arc/Gas Tungsten Arc Welding/Flux Core Arc Welding (JSC)
   Shielded Metal Arc Welding (JSC)
   Industrial Technology Welding Option (AS)

Woodworking/Cabinetmaking (JSC)
   Cabinetmaking (CA)
   Industrial Technology, Woodworking and Cabinetmaking Option (AS)
Programs of Study
Requirements for the Associate in Arts for transfer (AA-T) or Associate in Science for transfer (AS-T)
The Student Transfer Achievement Reform Act (Senate Bill 1440, now codified in California Education Code sections 66746-66749) guarantees admission to a California State University (CSU) campus for any community college student who completes an “associate degree for transfer”, a newly established variation of the associate degrees traditionally offered at a California community college. The Associate in Arts for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. Students completing these degrees (AA-T or AS-T) are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn one of these degrees, students must complete a minimum of 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. Students transferring to a CSU campus that does accept the AA-T or AS-T will be required to complete no more than 60 units after transfer to earn a bachelor’s degree (unless the major is a designated “high-unit” major). This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

At the time of catalog publication, a student may earn an AA-T in Psychology, Sociology, and Communication Studies. Additional majors are being developed. Please see a counselor or the 2011-12 catalog addendum at www.bakersfieldcollege.edu for more information.

The following is REQUIRED for all AA-T or AS-T degrees:
1. Minimum of 60 CSU-transferable semester units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.
3. Completion of a minimum of 18 semester units in an “AA-T” or “AS-T” major as detailed in the Program section of the catalog. All courses in the major must be completed with a grade of C or better or a “P” if the course is taken on a “pass-no pass” basis (title 5 § 55063). (Very few courses are pass-no pass basis for requirements in a major.)
4. Certified COMPLETION of the California State University General Education-Breadth pattern (CSU GE Breadth) OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern (see pages 45-47 for more information).

AGRICULTURE

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

Total Units: 32

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
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<td>AGBS B2</td>
<td>Agricultural Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>AGBS B52</td>
<td>Economics in Agriculture</td>
<td>3.0</td>
</tr>
<tr>
<td>SOIL B1</td>
<td>Introduction to Soil Science</td>
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</tr>
<tr>
<td>CRPS B1</td>
<td>Principles of Crop Production</td>
<td>3.0</td>
</tr>
<tr>
<td>AGR1 B1</td>
<td>Agriculture, Environment and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>AGBS B6</td>
<td>Agricultural Sales and Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B1</td>
<td>Principles of Crop Production</td>
<td>3.0</td>
</tr>
<tr>
<td>MCG B1 or</td>
<td>Introduction to Agricultural Mechanics</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B5 or</td>
<td>Introduction to Microsoft Office 2010</td>
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</tr>
<tr>
<td>COMS B2</td>
<td>Introduction to Computer Information Systems</td>
<td></td>
</tr>
<tr>
<td>WEXP B248</td>
<td>Cooperative Work Experience Education</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B2 or</td>
<td>Forage Crops</td>
<td>3.0</td>
</tr>
<tr>
<td>NRES B1</td>
<td>Range Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AANS B1 or</td>
<td>Introduction to Animal Science</td>
<td>3.0</td>
</tr>
<tr>
<td>AANS B2 or</td>
<td>Beef Production</td>
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</tr>
<tr>
<td>AANS B4 or</td>
<td>Dairy Production</td>
<td>3.0</td>
</tr>
<tr>
<td>AANS B10</td>
<td>Horse Production</td>
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</tr>
<tr>
<td>FORE B2 or</td>
<td>Natural Resources</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B1 or</td>
<td>Introduction to Forestry</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B3 or</td>
<td>Wildlife Management</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B5 or</td>
<td>Identification of California Wildlife</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B6</td>
<td>Forestry Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>AGR1 B49</td>
<td>Agriculture Leadership Training</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Agricultural Business Management Associate in Arts Degree
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

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. Agriculture Business Management Associate in Arts Degree is recommended for students planning to transfer to a 4-year college.

Total Units: 20

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>AGBS B2</td>
<td>Agricultural Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>SOIL B1</td>
<td>Introduction to Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>AGR1 B1</td>
<td>Agriculture, Environment and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>AGBS B6</td>
<td>Agricultural Sales and Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B1 or</td>
<td>Principles of Crop Production</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B1 or</td>
<td>Introduction to Forestry</td>
<td>3.0</td>
</tr>
</tbody>
</table>

ACCOUNTING

See Business Administration
BAKERSFIELD COLLEGE PROGRAMS OF STUDY

AGRICULTURE

ANSC B1 or ORNH B1 Introduction to Animal Science
MCAG B1 or COMS B5 or COMS B2 Introduction to Agricultural Mechanics 3.0
COMS B2 Introduction to Microsoft Office 2010
AGRI B49 Agriculture Leadership Training 2.0

Agricultural Business Management Associate in Science Degree
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.
Total Units: 32
Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGBS B2</td>
<td>Agricultural Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>SOIL B1</td>
<td>Introduction to Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRI B1</td>
<td>Agriculture, Environment and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>AGBS B6</td>
<td>Agricultural Sales and Communication</td>
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</tr>
<tr>
<td>CRPS B1</td>
<td>Principles of Crop Production</td>
<td>3.0</td>
</tr>
<tr>
<td>MCAG B1 or</td>
<td>Introduction to Agricultural Mechanics</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B5 or</td>
<td>Introduction to Microsoft Office 2010</td>
<td></td>
</tr>
<tr>
<td>COMS B2</td>
<td>Introduction to Computer Information</td>
<td></td>
</tr>
<tr>
<td>WEXP B248</td>
<td>Cooperative Work Experience Education</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B2 or</td>
<td>Forage Crops</td>
<td>3.0</td>
</tr>
<tr>
<td>NRES B1</td>
<td>Range Management</td>
<td>3.0</td>
</tr>
<tr>
<td>ANSC B1 or</td>
<td>Introduction to Animal Science</td>
<td>3.0</td>
</tr>
<tr>
<td>ANSC B2 or</td>
<td>Beef Production</td>
<td></td>
</tr>
<tr>
<td>ANSC B4 or</td>
<td>Dairy Production</td>
<td></td>
</tr>
<tr>
<td>ANSC B10</td>
<td>Horse Production</td>
<td></td>
</tr>
<tr>
<td>FORE B2 or</td>
<td>Natural Resources</td>
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<td>FORE B1 or</td>
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<td></td>
</tr>
<tr>
<td>FORE B3 or</td>
<td>Wildlife Management</td>
<td></td>
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<td>FORE B5 or</td>
<td>Identification of California Wildlife</td>
<td></td>
</tr>
<tr>
<td>FORE B6</td>
<td>Forestry Skills</td>
<td></td>
</tr>
<tr>
<td>AGRI B49</td>
<td>Agriculture Leadership Training</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Animal Science Certificate of Achievement
See also Preveterinary Medical Option and Registered Veterinary Technician.
Upon completion of the following courses with at least a “C” grade in each course, the student will be awarded an Animal Science Certificate of Achievement.
Certificate prepares students for entry level employment in food animal production and animal management and care. Career opportunities in Animal Science include entry level production jobs such as feed mill tech, beef tech, swine tech, poultry tech, groomer, small animal assistant tech, and pet store employee.
Total Units: 30
Required Courses:

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<th>Title</th>
<th>Units</th>
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<td>3.0</td>
</tr>
<tr>
<td>AGRI B1</td>
<td>Agriculture, Environment and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>ANSC B1</td>
<td>Introduction to Animal Science</td>
<td>3.0</td>
</tr>
<tr>
<td>ANSC B49</td>
<td>Agriculture Leadership Training</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Animal Science Associate in Arts Degree
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.
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 horse, beef, sheep, swine, dairy cattle and companion animals are stressed in the courses.
Career opportunities in Animal Science include Feed salesperson, beef production, swine production and dairy production.
Total Units: 23
Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
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<td>Agricultural Economics</td>
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</tr>
<tr>
<td>AGRI B1</td>
<td>Agriculture, Environment and Society</td>
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</tr>
<tr>
<td>ANSC B1</td>
<td>Introduction to Animal Science</td>
<td>3.0</td>
</tr>
<tr>
<td>ANSC B2 or</td>
<td>Beef Production</td>
<td>3.0</td>
</tr>
<tr>
<td>ANSC B3 or</td>
<td>Sheep Production</td>
<td></td>
</tr>
<tr>
<td>ANSC B4 or</td>
<td>Dairy Production</td>
<td></td>
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<tr>
<td>ANSC B10</td>
<td>Horse Production</td>
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</tr>
<tr>
<td>ANSC B6</td>
<td>Applied Animal Nutrition</td>
<td>4.0</td>
</tr>
<tr>
<td>ANSC B7</td>
<td>Animal Diseases</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRI B49</td>
<td>Agriculture Leadership Training</td>
<td>2.0</td>
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</tbody>
</table>

AGRICULTURE
**Animal Science Associate in Science Degree**
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

The Associate of Science major is designed to prepare students for occupations in areas of agriculture involving production of livestock, focusing on food animal production and companion animals. Career opportunities in Animal Science include Dairy Herdsman, Ranch Manager, Swine Production Manager, and Feed Sales.

**Total Units:** 29

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGBS B2</td>
<td>Agricultural Economics</td>
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</tr>
<tr>
<td>AGRI B1</td>
<td>Agriculture, Environment and Society</td>
<td>3.0</td>
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<tr>
<td>ANSC B1</td>
<td>Introduction to Animal Science</td>
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</tr>
<tr>
<td>MCAG B1</td>
<td>Introduction to Agricultural Mechanics</td>
<td>3.0</td>
</tr>
<tr>
<td>WEXP B248 or WEXP B249</td>
<td>Cooperative Work Experience Education</td>
<td>3.0</td>
</tr>
<tr>
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<td>Agriculture Leadership Training</td>
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</table>

Select 6 units from the following courses:

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<tr>
<th>Course Number</th>
<th>Title</th>
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<tbody>
<tr>
<td>ANSC B2</td>
<td>Beef Production</td>
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</tr>
<tr>
<td>ANSC B3</td>
<td>Sheep Production</td>
<td>3.0</td>
</tr>
<tr>
<td>ANSC B4</td>
<td>Dairy Production</td>
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</tr>
<tr>
<td>ANSC B10</td>
<td>Horse Production</td>
<td>3.0</td>
</tr>
<tr>
<td>ANSC B6</td>
<td>Applied Animal Nutrition</td>
<td>4.0</td>
</tr>
<tr>
<td>ANSC B7</td>
<td>Animal Diseases</td>
<td>3.0</td>
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<tr>
<td>ANSC B11</td>
<td>Livestock Selection &amp; Evaluation</td>
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<td>ANSC B20</td>
<td>Companion Animal Care</td>
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<td>ANSC B60</td>
<td>Bovine Reproduction</td>
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<tr>
<td>ANSC B71</td>
<td>Diseases of Beef and Dairy Cattle</td>
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<tr>
<td>ANSC B72</td>
<td>Equine Health</td>
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<td>ANSC B74</td>
<td>Equine Nutrition</td>
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<td>ANSC B80</td>
<td>Introduction to Veterinary Technology</td>
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<td>ANSC B82</td>
<td>Anatomy and Physiology of Domestic Animals</td>
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<td>ANSC B84</td>
<td>Small Animal Diseases</td>
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<td>ANSC B85</td>
<td>Large Animal Diseases</td>
<td>1.5</td>
</tr>
<tr>
<td>ANSC B86</td>
<td>Pharmacology for Veterinary Technicians</td>
<td>1.5</td>
</tr>
<tr>
<td>ANSC B88</td>
<td>Surgery, Dental and Anesthesiology for Veterinary Technicians</td>
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<tr>
<td>ANSC B90</td>
<td>Emergency Medicine, Surgery/Nursing</td>
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<tr>
<td>ANSC B92</td>
<td>Clinical Pathology for Veterinary Technicians</td>
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<tr>
<td>ANSC B94</td>
<td>Caged Birds, Laboratory, and Exotic Animal Medicine</td>
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<tr>
<td>ANSC B96</td>
<td>Radiology, Ultrasound, and Diagnostic Imaging for Veterinary Technology</td>
<td>1.5</td>
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<tr>
<td>NRES B1</td>
<td>Range Management</td>
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</table>

**Environmental Horticulture Certificate of Achievement**

The Certificate of Achievement in Environmental Horticulture is designed for the student desiring specialized training in order to enter the workforce in the least amount of time. See also Plant Science.

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

**Total Units:** 29

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
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<tbody>
<tr>
<td>CRPS B3</td>
<td>Integrated Pest Management</td>
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<td>ORNH B1</td>
<td>Introduction to Ornamental Horticulture</td>
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<tr>
<td>ORNH B2</td>
<td>Fundamentals of Nursery Management and Plant Production</td>
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<tr>
<td>ORNH B3</td>
<td>Landscape Installation and Maintenance</td>
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<tr>
<td>ORNH B4</td>
<td>Plant Propagation</td>
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<tr>
<td>ORNH B6</td>
<td>Ornamental Plant Identification - Ground Covers, Vines, and Dwarf Shrubs</td>
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</tr>
<tr>
<td>ORNH B7</td>
<td>Ornamental Plant Identification - Large Shrubs, Small Trees, Large Trees &amp; Palms</td>
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<tr>
<td>ORNH B8</td>
<td>Introduction to Landscape Design</td>
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<tr>
<td>WEXP B248 or WEXP B249</td>
<td>Cooperative Work Experience Education</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRI B49</td>
<td>Agriculture Leadership Training</td>
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</tr>
</tbody>
</table>

**Environmental Horticulture Associate in Arts Degree**

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

The Associate in Arts degree in Environmental Horticulture is designed for the student planning to transfer to a 4 year college or university. See also Plant Science.

**Total Units:** 21

**Required Courses:**

<table>
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<td>Plant Biology</td>
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<tr>
<td>ORNH B1</td>
<td>Introduction to Ornamental Horticulture</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B4</td>
<td>Plant Propagation</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B6</td>
<td>Ornamental Plant Identification - Ground Covers, Vines, and Dwarf Shrubs</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B7</td>
<td>Ornamental Plant Identification - Large Shrubs, Small Trees, Large Trees &amp; Palms</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B8</td>
<td>Introduction to Landscape Design</td>
<td>3.0</td>
</tr>
<tr>
<td>WEXP B248 or WEXP B249</td>
<td>Cooperative Work Experience Education</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRI B49</td>
<td>Agriculture Leadership Training</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**Environmental Horticulture Associate in Science Degree**

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.
The Associate in Science degree in Environmental Horticulture is designed for the student desiring to enter the workforce after earning a 2 year degree. See Plant Science.  

**Total Units: 33**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRPS B3</td>
<td>Integrated Pest Management</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B10</td>
<td>Plant Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>ORNH B1</td>
<td>Introduction to Ornamental Horticulture</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B2</td>
<td>Fundamentals of Nursery Management and Plant Production</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B3</td>
<td>Landscape Installation and Maintenance</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B4</td>
<td>Plant Propagation</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B6</td>
<td>Ornamental Plant Identification - Ground Covers, Vines, and Dwarf Shrubs</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B7</td>
<td>Ornamental Plant Identification - Large Shrubs, Small Trees, Large Trees and Palms</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B8</td>
<td>Introduction to Ornamental Horticulture</td>
<td>3.0</td>
</tr>
<tr>
<td>SOIL B1</td>
<td>Introduction to Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRI B49</td>
<td>Agriculture Leadership Training</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**Forestry Certificate of Achievement**

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

The Certificate of Achievement in Forestry is designed for students desiring to enter the workforce after completing one year of college. Many technician level careers are available in the forestry/natural resources/wildlife fields. Career opportunities include Forestry, natural resources, wildlife, parks and outdoor recreation, fisheries, rangeland and watershed technician positions.  

**Total Units: 36**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGBS B2 or AGBS B52</td>
<td>Agricultural Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>SOIL B1</td>
<td>Introduction to Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRI B1</td>
<td>Agriculture, Environment and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B1</td>
<td>Introduction to Forestry</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B2</td>
<td>Natural Resources</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B6</td>
<td>Forestry Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>MCAG B1</td>
<td>Introduction to Agricultural Mechanics</td>
<td>3.0</td>
</tr>
<tr>
<td>WEXP B248 or WEXP B249</td>
<td>Cooperative Work Experience Education</td>
<td>1.0</td>
</tr>
<tr>
<td>AGRI B49</td>
<td>Agriculture Leadership Training</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Select 12 units from the following courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>FORE B3</td>
<td>Wildlife Management</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B4</td>
<td>Wildlife Law Enforcement</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B5</td>
<td>Identification of California Wildlife</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B7</td>
<td>Wildland Fire Management</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B3</td>
<td>Integrated Pest Management</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B10</td>
<td>Plant Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>NRES B1</td>
<td>Range Management</td>
<td>3.0</td>
</tr>
<tr>
<td>NRES B2</td>
<td>Parks and Outdoor Recreation</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL B11</td>
<td>Concepts of Biology</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Forestry Associate in Arts Degree**

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

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 and not the A.A. degree. Career opportunities include forestry, fishing industries and wildlife management.  

**Total Units: 24**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGBS B2</td>
<td>Agricultural Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>SOIL B1</td>
<td>Introduction to Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRI B1</td>
<td>Agriculture, Environment and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B2</td>
<td>Natural Resources</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B6</td>
<td>Forestry Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B1 or FORE B3</td>
<td>Introduction to Forestry</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B4 or FORE B7</td>
<td>Wildlife Law Enforcement</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B5 or FORE B7</td>
<td>Identification of California Wildlife</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B1 or FORE B3</td>
<td>Wildland Fire Management</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B3 or CRPS B10</td>
<td>Integrated Pest Management</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B37 or COMS B2</td>
<td>Introduction to Geographic Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
<tr>
<td>WEXP B248 or WEXP B249</td>
<td>Cooperative Work Experience Education</td>
<td>1.0</td>
</tr>
<tr>
<td>AGRI B49</td>
<td>Agriculture Leadership Training</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**Forestry Associate in Science Degree**

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

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 and not the A.A. degree. Career opportunities include forestry, fishing industries and wildlife management.
degree. Career opportunities include forestry, fishing industries and wildlife management.

Total Units: 34

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGBS B2</td>
<td>Agricultural Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>SOIL B1</td>
<td>Introduction to Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRI B1</td>
<td>Agriculture, Environment and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B3</td>
<td>Integrated Pest Management</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B1</td>
<td>Introduction to Forestry</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B2</td>
<td>Natural Resources</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B6</td>
<td>Forestry Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>MCAG B1</td>
<td>Introduction to Agricultural Mechanics</td>
<td>3.0</td>
</tr>
<tr>
<td>WEXP B248 or</td>
<td>Cooperative Work Experience Education</td>
<td>1.0</td>
</tr>
<tr>
<td>WEXP B249</td>
<td>Cooperative Work Experience Education</td>
<td></td>
</tr>
<tr>
<td>AGRI B49</td>
<td>Agriculture Leadership Training</td>
<td>2.0</td>
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</table>

Select 7 units from the following courses:

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<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORE B3</td>
<td>Wildlife Management</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B4</td>
<td>Wildlife Law Enforcement</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B5</td>
<td>Identification of California Wildlife</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B7</td>
<td>Wildland Fire Management</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B10</td>
<td>Plant Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>NRES B1</td>
<td>Range Management</td>
<td>3.0</td>
</tr>
<tr>
<td>NRES B2</td>
<td>Parks and outdoor Recreation</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL B11</td>
<td>Concepts of Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>COMS B2</td>
<td>Introduction to Computer Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B37</td>
<td>Introduction to Geographic Information</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Horticulture Associate in Arts Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

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.

Total Units: 24

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGBS B2</td>
<td>Agricultural Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>SOIL B1</td>
<td>Introduction to Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRI B1</td>
<td>Agriculture, Environment and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B1</td>
<td>Principles of Crop Production</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B10</td>
<td>Plant Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>ORNH B4</td>
<td>Plant Propagation</td>
<td>3.0</td>
</tr>
<tr>
<td>AGBS B6</td>
<td>Agriculture Sales and Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>MCAG B1 or</td>
<td>Introduction to Agricultural Mechanics</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B4 or</td>
<td>Plant Propagation</td>
<td></td>
</tr>
<tr>
<td>ORNH B6</td>
<td>Ornamental Plant Identification - Ground Shrubs, Vines, and Dwarf Shrubs</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRI B49</td>
<td>Agriculture Leadership Training</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Plant Science Certificate of Achievement

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.

Career opportunities in Crop Science include Farm labor foreman, irrigation manager, seed lab technician, starting research technician, soils lab technician, pest control technician.

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

Total Units: 27

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGBS B2</td>
<td>Agricultural Economics</td>
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</tr>
<tr>
<td>SOIL B1</td>
<td>Introduction to Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRI B1</td>
<td>Agriculture, Environment and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B4</td>
<td>Plant Propagation</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B3</td>
<td>Integrated Pest Management</td>
<td>3.0</td>
</tr>
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</table>

Crops Emphasis

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRPS B1</td>
<td>Principles of Crop Production</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B2</td>
<td>Forage Crops</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B4</td>
<td>Vegetable Production</td>
<td>3.0</td>
</tr>
<tr>
<td>WEXP B248 or</td>
<td>Cooperative Work Experience Education</td>
<td>1.0</td>
</tr>
<tr>
<td>WEXP B249</td>
<td>Cooperative Work Experience Education</td>
<td></td>
</tr>
</tbody>
</table>

Plant Science Associate in Arts Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

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. See also Environmental Horticulture. Career opportunities in Crop Science include Truck and market farm management, orchard and vinyard management, horticulture pest control, low volume irrigation equipment supply and sales, agriculture research technician.

Total Units: 22

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>AGBS B2</td>
<td>Agricultural Economics</td>
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<td>SOIL B1</td>
<td>Introduction to Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRI B1</td>
<td>Agriculture, Environment and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B10</td>
<td>Plant Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>ORNH B4</td>
<td>Plant Propagation</td>
<td>3.0</td>
</tr>
<tr>
<td>AGBS B6</td>
<td>Agriculture Sales and Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>MCAG B1 or</td>
<td>Introduction to Agricultural Mechanics</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B4 or</td>
<td>Plant Propagation</td>
<td></td>
</tr>
<tr>
<td>ORNH B6</td>
<td>Ornamental Plant Identification - Ground Shrubs, Vines, and Dwarf Shrubs</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRI B49</td>
<td>Agriculture Leadership Training</td>
<td>2.0</td>
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</tbody>
</table>

Horticulture Emphasis

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORNH B6</td>
<td>Ornamental Plant Identification-Ground Covers, Vines, and Dwarf Shrubs</td>
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<td>ORNH B7</td>
<td>Ornamental Plant Identification- Large Shrubs, Small Trees, Large Trees and Palms</td>
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Crops Emphasis

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRPS B1</td>
<td>Principles of Crop Production</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B2 or</td>
<td>Forage Crops</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B4</td>
<td>Vegetable Production</td>
<td>3.0</td>
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</table>
## Plant Science Associate in Science Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

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. See also Environmental Horticulture. Career opportunities in Crop Science include farm management, agricultural pest control, fertilizer sales and application, soil laboratory technician, irrigation equipment supply and sales, agricultural research technician.

**Total Units: 25-28**

<table>
<thead>
<tr>
<th>Required Courses:</th>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>SOIL B1</td>
<td>Introduction to Soil Science</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>AGRI B1</td>
<td>Agriculture, Environment and Society</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>CRPS B10</td>
<td>Plant Biology</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>ORNH B4</td>
<td>Plant Propagation</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>CRPS B3</td>
<td>Integrated Pest Management</td>
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### Horticulture Emphasis

<table>
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<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORNH B2</td>
<td>Fundamentals of Nursery Management and Plant Production</td>
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<td>ORNH B36</td>
<td>Beginning Floral Design</td>
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<tr>
<td>ORNH B3</td>
<td>Landscape Installation and Maintenance</td>
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</tr>
<tr>
<td>ORNH B8</td>
<td>Introduction to Landscape Design</td>
<td>3.0</td>
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### Crops Emphasis

<table>
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<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRPS B1</td>
<td>Principles of Crop Production</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B2</td>
<td>Forage Crops</td>
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</tr>
<tr>
<td>CRPS B4</td>
<td>Vegetable Production</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### 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. See also Animal Science.

**Suggested Courses**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEXP B248 or WEXP B249</td>
<td>Cooperative Work Experience Education</td>
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<tr>
<td>ANSC B1</td>
<td>Introduction to Animal Science</td>
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</tr>
<tr>
<td>ANSC B6</td>
<td>Applied Animal Nutrition</td>
<td>4.0</td>
</tr>
<tr>
<td>ANSC B7</td>
<td>Animal Diseases</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL B3a</td>
<td>General Biology I</td>
<td>5.0</td>
</tr>
<tr>
<td>BIOL B3b</td>
<td>General Biology II</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B1a</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B1b</td>
<td>General Chemistry and Chemical Analysis</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B18</td>
<td>Elementary Organic Chemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH B22</td>
<td>Elementary Probability and Statistics</td>
<td>5.0</td>
</tr>
<tr>
<td>PHYS B2a</td>
<td>General Physics-Mechanics and Heat</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B2b</td>
<td>General Physics-Sound, Light, Electricity, Magnetism, Modern Physics</td>
<td>4.0</td>
</tr>
</tbody>
</table>

### Registered Veterinary Technicians Option Job Skills Certificate

This certificate is required by the California Veterinary Medical Board in order to qualify students to be eligible to take the California Veterinary Medical Board’s Registered Veterinary Technician licensing exam.

Upon completion of the following courses with at least a “C” grade in each course, the student will be awarded a Registered Veterinary Technicians Job Skills Certificate.

**Total Units: 17.5**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC B80</td>
<td>Introduction to Veterinary Technology</td>
<td>2.0</td>
</tr>
<tr>
<td>ANSC B82</td>
<td>Anatomy and Physiology of Domestic Animals</td>
<td>2.0</td>
</tr>
<tr>
<td>ANSC B84</td>
<td>Small Animal Diseases</td>
<td>1.5</td>
</tr>
<tr>
<td>ANSC B85</td>
<td>Large Animal Diseases</td>
<td>1.5</td>
</tr>
<tr>
<td>ANSC B86</td>
<td>Pharmacology for Veterinary Technicians</td>
<td>1.5</td>
</tr>
<tr>
<td>ANSC B88</td>
<td>Surgery, Dental and Anesthesiology for Veterinary Technicians</td>
<td>1.5</td>
</tr>
<tr>
<td>ANSC B90</td>
<td>Emergency Medicine, Surgery/Nursing Procedures for Veterinary Technicians</td>
<td>2.0</td>
</tr>
<tr>
<td>ANSC B92</td>
<td>Clinical Pathology for Veterinary Technicians</td>
<td>2.0</td>
</tr>
<tr>
<td>ANSC B94</td>
<td>Caged Birds, Laboratory, and Exotic Animal Medicine</td>
<td>2.0</td>
</tr>
<tr>
<td>ANSC B96</td>
<td>Radiology, Ultrasound, and Diagnostic Imaging for Veterinary Technology</td>
<td>1.5</td>
</tr>
</tbody>
</table>

### AIR CONDITIONING, HEATING AND REFRIGERATION

#### Air Condition/Heating/Refrigeration Job Skills Certificate

This certificate covers the principles of refrigeration and air conditioning applied to domestic and commercial systems. The repair and maintenance of HVAC major system components and controls is emphasized.

Upon completion of the following courses with at least a “C” grade in each course, the student will be awarded an Air Conditioning, Heating, and Refrigeration Job Skills Certificate.

**Total Units: 6**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEXP B248 or WEXP B249</td>
<td>Cooperative Work Experience Education</td>
<td>3.0</td>
</tr>
<tr>
<td>ANSC B1</td>
<td>Introduction to Animal Science</td>
<td>3.0</td>
</tr>
<tr>
<td>ANSC B6</td>
<td>Applied Animal Nutrition</td>
<td>4.0</td>
</tr>
<tr>
<td>ANSC B7</td>
<td>Animal Diseases</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL B3a</td>
<td>General Biology I</td>
<td>5.0</td>
</tr>
<tr>
<td>BIOL B3b</td>
<td>General Biology II</td>
<td>5.0</td>
</tr>
<tr>
<td>ACRF B54a</td>
<td>Air Conditioning and Refrigeration</td>
<td>3.0</td>
</tr>
<tr>
<td>ACRF B54b</td>
<td>Air Conditioning and Refrigeration</td>
<td>3.0</td>
</tr>
</tbody>
</table>
AMERICAN SIGN LANGUAGE

American Sign Language Associate in Arts Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

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. The objective of the program is to provide students with a foundation for achieving fluency and the opportunity to transfer to a four-year institution. Employment opportunities include interpreting, teaching and social service. If transferring to an institution other than UC or CSU, students should check with the receiving institution to ensure transferability of ASL courses as foreign language credit.

Total Units: 20

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASL B1</td>
<td>American Sign Language 1</td>
<td>5.0</td>
</tr>
<tr>
<td>ASL B2</td>
<td>American Sign Language 2</td>
<td>5.0</td>
</tr>
<tr>
<td>ASL B3</td>
<td>American Sign Language 3</td>
<td>5.0</td>
</tr>
<tr>
<td>ASL B4</td>
<td>American Sign Language 4</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Other Suggested Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASL B6</td>
<td>American Deaf Culture</td>
<td>3.0</td>
</tr>
<tr>
<td>ASL B7</td>
<td>ASL Literature and Performance</td>
<td>3.0</td>
</tr>
</tbody>
</table>

ANIMAL SCIENCE

See Agriculture

ANTHROPOLOGY

Anthropology Associate in Arts Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

Anthropology is the scientific study of humanity, examining human biology and culture today and in the past, and biological and cultural change through time. Students with an Anthropology major concentrate in one of the following areas: cultural anthropology, biological/physical anthropology or archaeology. The major in anthropology prepares students for a variety of research/academic positions (e.g. museums, colleges and universities, zoos or government agencies); and non-academic/research positions (e.g. businesses, archeological companies or professional writing). The objective of this program is to prepare students for transfer to a four-year university. Anthropology’s emphasis on research skills, organizational skills, critical thinking, technical writing, project management and use of holistic perspective make it an excellent undergraduate major for a variety of fields and graduate programs.

Career opportunities in Anthropology include teaching, government service, research, and law.

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 Bakersfield College Apprenticeship Department at 395-4408 for further information.

- Carpentry
- Electricians
- Operating Engineers
- Plumbers and Steamfitters
- Sheet Metal

Apprenticeship Associate Degree Program

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
</table>

Apprenticeship classes for duration of apprentice period (45 units maximum)

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
</table>

Work Experience (four semesters, maximum of 16 units)

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
</table>

Related technical subjects as recommended by JAC

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
</table>
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.

**Apprenticeship Certificate of Achievement Programs**

Apprenticeship classes for 
duration of apprentice period 
Work Experience 
4-16 Electives (as recommended by JAC) to reach 30 units total (if needed).

**ARCHITECTURE**

**Architectural CAD Job Skills Certificate**

This certificate covers the principles of architectural CAD to include basic 2D and 3D AutoCAD application as well as BIM related software covering architectural practices including both residential and light commercial working documents. Emphasis is also placed on architectural delineation using software.

Upon completion of the following courses with at least a “C” grade in each course, the student will be awarded an Architectural CAD Job Skills Certificate.

**Total Units: 11**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDR B10</td>
<td>Introduction to Industrial Drawing &amp; Graphics</td>
<td>1.0</td>
</tr>
<tr>
<td>INDR B11</td>
<td>Introduction to Computer Aided Drafting &amp; Design (CAD)</td>
<td>1.0</td>
</tr>
<tr>
<td>INDR B20a</td>
<td>Computer Aided Drafting &amp; Design CAD</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH B16</td>
<td>Digital Tools for Graphics Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH B33</td>
<td>Architectural Computer Practice</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Architectural Drafting Associate in Arts Degree**

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better. This degree covers the principles of architectural CAD to include basic 2D and 3D AutoCAD application as well as BIM related software covering architectural practices including both residential and light commercial working documents. Emphasis is also placed on architectural delineation using software. Career opportunities include architectural draftsmen, CAD operator, and CAD manager.

**Total Units: 27.5**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH B1</td>
<td>Introduction to Architecture &amp; Environmental Design</td>
<td>1.5</td>
</tr>
<tr>
<td>ARCH B6</td>
<td>Materials of Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH B11</td>
<td>Design and Perspective Drawing</td>
<td>4.0</td>
</tr>
<tr>
<td>ARCH B12</td>
<td>Design Drawing and Color</td>
<td>4.0</td>
</tr>
<tr>
<td>ARCH B16</td>
<td>Digital Tools for Graphics Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH B21</td>
<td>Architectural Design Fundamentals I</td>
<td>4.0</td>
</tr>
<tr>
<td>ARCH B33</td>
<td>Architectural Computer Practice</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B11</td>
<td>Introduction to Computer Aided Drafting &amp; Design (CAD)</td>
<td>1.0</td>
</tr>
<tr>
<td>MATH B1a or B6a</td>
<td>Precalculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B2a</td>
<td>General Physics-Mechanics &amp; Heat</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Recommended Courses**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDR B20a</td>
<td>Computer Aided Drafting &amp; Design (CAD)</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Suggested sequence of courses for Architecture/Architectural Drafting A.S. Degree**

**First Semester**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH B1</td>
<td>Introduction to Architecture &amp; Environmental Design</td>
<td>1.5</td>
</tr>
<tr>
<td>ARCH B11</td>
<td>Design and Perspective Drawing</td>
<td>4.0</td>
</tr>
<tr>
<td>ARCH B16</td>
<td>Digital Tools for Graphics Communication</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH B6</td>
<td>Materials of Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH B12</td>
<td>Design Drawing and Color</td>
<td>4.0</td>
</tr>
<tr>
<td>INDR B11</td>
<td>Introduction to Computer Aided Drafting &amp; Design (CAD)</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**Third Semester**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH B21</td>
<td>Architectural Design Fundamentals I</td>
<td>4.0</td>
</tr>
<tr>
<td>ARCH B31</td>
<td>Architectural Practice</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH B32</td>
<td>Architectural Computer Graphics</td>
<td>1.0</td>
</tr>
<tr>
<td>PHYS B2a</td>
<td>General Physics-Mechanics &amp; Heat</td>
<td>4.0</td>
</tr>
</tbody>
</table>
Fourth Semester

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH B22</td>
<td>Architectural Design Fundamentals II</td>
<td>4.0</td>
</tr>
<tr>
<td>ARCH B33</td>
<td>Architectural Computer Practice</td>
<td>3.0</td>
</tr>
</tbody>
</table>

ART
See also Digital Arts

Art Associate in Arts Degree
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.
Total Units: 18

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART B2 or</td>
<td>Drawing I</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B3</td>
<td>Drawing II</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B4</td>
<td>Two Dimensional Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B1</td>
<td>Art Appreciation</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives: at least 9 units

- ART B6, B7, B8 Painting and Drawing Series
- ART B10, B11, B12 Ceramic Series
- ART B13, B14 Sculpture Series
- ART B17, B46, B47, B48 Photography Series
- ART B20, B24, B25, B40, B41, B42 Digital Arts Series
- ART B35, B36, B37 Art History Series

AUTOMOTIVE

Auto Brakes and Wheel Alignment Certificate of Achievement
This program develops student’s knowledge and skills in automotive brake and suspension systems operation, trouble-shooting, maintenance, repair, and wheel alignment procedures.
Total Units: 24

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO B106</td>
<td>Automotive Brakes, Suspension, Steering</td>
<td>9.0</td>
</tr>
<tr>
<td>AUTO B64 or</td>
<td>Automotive Electricity and Electronics</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B14</td>
<td>Auto Tune-Up: Electrical/ Ignition/Accessoriess</td>
<td>11.0</td>
</tr>
<tr>
<td>INDT B10 or</td>
<td>Occupational Readiness</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives: to equal at least 24 units

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO B1ab</td>
<td>Introduction to Automotive Technology</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO B14</td>
<td>Auto Tune-Up: Electrical/ Ignition/Accessories</td>
<td>11.0</td>
</tr>
<tr>
<td>AUTO B15</td>
<td>Auto Tune-Up: Fuel Systems and Emission Control</td>
<td>11.0</td>
</tr>
<tr>
<td>AUTO B64</td>
<td>Automotive Electricity and Electronics</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B61</td>
<td>Basic &amp; Enhanced Area Clean Air Car Course</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B112</td>
<td>Automotive Transmissions and Gear Boxes</td>
<td>9.0</td>
</tr>
<tr>
<td>INDT B275</td>
<td>Special Problems in Automotives</td>
<td>2-3.0</td>
</tr>
<tr>
<td>WELD B1a</td>
<td>Introduction to Oxygen Acetylene Welding and Cutting</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B1b</td>
<td>Introduction to the Welding Processes</td>
<td>2.0</td>
</tr>
<tr>
<td>WEXP B249</td>
<td>Cooperative Work Experience Education</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Auto Engine Overhaul Certificate of Achievement
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.
Total Units: 24

Required Courses:

For Day Students:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO B2a</td>
<td>Automotive Engine Overhaul</td>
<td>9.0</td>
</tr>
<tr>
<td>AUTO B2b</td>
<td>Automotive Engines Machining</td>
<td>9.0</td>
</tr>
<tr>
<td>INDT B10 or</td>
<td>Occupational Readiness Equivalent</td>
<td>3.0</td>
</tr>
</tbody>
</table>

For Night Students:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO B75a</td>
<td>Introduction to Engine Overhaul</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO B75b</td>
<td>Engine Repair Techniques</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO B75c</td>
<td>Advanced Engine Overhaul</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO B75d</td>
<td>Advanced Engine Machining</td>
<td>3.0</td>
</tr>
<tr>
<td>INDT B10 or</td>
<td>Occupational Readiness Equivalent</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Elective:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO B2a</td>
<td>Automotive Engine Overhaul</td>
<td>9.0</td>
</tr>
<tr>
<td>AUTO B2b</td>
<td>Automotive Engines Machining</td>
<td>9.0</td>
</tr>
<tr>
<td>INDT B10 or</td>
<td>Occupational Readiness Equivalent</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Auto Tune-Up and Emission Systems Certificate of Achievement
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.
Total Units: 26

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO B1ab</td>
<td>Introduction to Automotive Technology</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO B14</td>
<td>Auto Tune-Up: Electrical/ Ignition/Accessories</td>
<td>11.0</td>
</tr>
<tr>
<td>AUTO B15</td>
<td>Auto Tune-Up: Fuel Systems and Emission Control</td>
<td>11.0</td>
</tr>
<tr>
<td>AUTO B64</td>
<td>Automotive Electricity and Electronics</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B61</td>
<td>Basic &amp; Enhanced Area Clean Air Car Course</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B112</td>
<td>Automotive Transmissions and Gear Boxes</td>
<td>9.0</td>
</tr>
<tr>
<td>INDT B275</td>
<td>Special Problems in Automotives</td>
<td>2-3.0</td>
</tr>
<tr>
<td>WELD B1a</td>
<td>Introduction to Oxygen Acetylene Welding and Cutting</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B1b</td>
<td>Introduction to the Welding Processes</td>
<td>2.0</td>
</tr>
<tr>
<td>WEXP B249</td>
<td>Cooperative Work Experience Education</td>
<td>4.0</td>
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</table>
BAKERSFIELD COLLEGE PROGRAMS OF STUDY

**Programs of Study**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO B14</td>
<td>Auto Tune-Up: Electrical/Ignition/Accessories</td>
<td>11.0</td>
</tr>
<tr>
<td>AUTO B15</td>
<td>Auto Tune-Up: Fuel Systems and Emission Control</td>
<td>11.0</td>
</tr>
<tr>
<td>INDT B10 or</td>
<td>Occupational Readiness Equivalent</td>
<td>3.0</td>
</tr>
</tbody>
</table>

*Electives: to equal at least 26 units*

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO B59</td>
<td>Automotive Air Conditioning</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B64</td>
<td>Automotive Electricity and Electronics</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B61</td>
<td>Basic &amp; Enhanced Area Clean Air Car Course</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B75a or</td>
<td>Introduction to Engine Overhaul</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO B2a</td>
<td>Automotive Engine Overhaul</td>
<td>9.0</td>
</tr>
<tr>
<td>ELET B1</td>
<td>Basic Electronics (DC and AC)</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGL B50</td>
<td>Introduction to College Composition</td>
<td>4.0</td>
</tr>
<tr>
<td>WEXP B249</td>
<td>Cooperative Work Experience Education</td>
<td>1-4.0</td>
</tr>
<tr>
<td>INDT B275</td>
<td>Special Problems in Automotive</td>
<td>2-3.0</td>
</tr>
</tbody>
</table>

**Automotive Heating, Ventilation & Air Conditioning (HVAC) Job Skills Certificate**

This program develops student’s knowledge and skills in automotive and light truck heating and air conditioning systems. The program includes instruction and theory in the operation, diagnosis, environmental concerns from refrigerants, electrical controls and computer operation, and proper repairs to these systems. Career opportunities in Automotive Technology prepares automotive technicians for employment as auto technicians for operation, diagnosis, environmental concerns from refrigerants, electrical controls and computer operation, and proper repairs to these systems.

*Total Units: 15*

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO B15</td>
<td>Auto Tune-Up: Fuel Systems and Emission Control</td>
<td>11.0</td>
</tr>
<tr>
<td>AUTO B61</td>
<td>Basic and Enhanced Area Clean Air Car Course</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Industrial Technology, Automotive Option Associate in Science Degree**

Careers opportunities in automotive technology include automotive tune-ups, engine overhaul, clean-air and emissions testing.

*Total Units: 32*

Select 32 units from the following courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO B2a</td>
<td>Automotive Engine Overhaul</td>
<td>9.0</td>
</tr>
<tr>
<td>AUTO B2b</td>
<td>Automotive Engines Machining</td>
<td>9.0</td>
</tr>
<tr>
<td>AUTO B106</td>
<td>Automotive Brakes, Suspension, Steering and Alignment</td>
<td>9.0</td>
</tr>
<tr>
<td>AUTO B112</td>
<td>Automotive Transmissions and Gear Boxes</td>
<td>9.0</td>
</tr>
<tr>
<td>AUTO B14</td>
<td>Auto Tune-Up: Electrical/Ignition/Accessories</td>
<td>11.0</td>
</tr>
<tr>
<td>AUTO B15</td>
<td>Auto Tune-Up: Fuel Systems and Emission Controls</td>
<td>11.0</td>
</tr>
<tr>
<td>ELET B1</td>
<td>Basic Electronics (DC and AC)</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**BIOLOGY**

*See also Primary Care Associate*

**Biology Associate in Science Degree**

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

Biology is the study and application of principles of
cell biology, 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 using the scientific method. 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. Career opportunities in Biology include many fields of biology, medical school, dental school and veterinary school.

Emphasis in General Biology  
*Total Units: 20*

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL B3a</td>
<td>General Biology I</td>
<td>5.0</td>
</tr>
<tr>
<td>BIOL B3b</td>
<td>General Biology II</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B1a</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B1b</td>
<td>General Chemistry and Chemical Analysis</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**Electives:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL B16</td>
<td>General Microbiology</td>
<td>5.0</td>
</tr>
<tr>
<td>BIOL B21</td>
<td>Special Projects in Biology</td>
<td>1-2.0</td>
</tr>
</tbody>
</table>

Biology Associate in Science Degree  
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

Courses required for the Human Biology Associate of Science degree include biology and chemistry courses necessary for transfer to allied health programs such as nursing, physical therapy, Physician Assistant, and radiology. Please refer to the Suggested Program information and check with a counselor concerning specific degree requirements to specific programs and transfer institutions. Please note that many of the courses have prerequisites that are best taken in the appropriate order to ensure success.

Career opportunities in Biology include Nursing, physical therapy, medical technologist, and physician assistant.

Emphasis in Human Biology  
*Total Units: 18*

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL B32</td>
<td>Human Anatomy &amp; Physiology I</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL B33</td>
<td>Human Anatomy &amp; Physiology II</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL B16</td>
<td>General Microbiology</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**Electives to equal at least 18 units:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL B21</td>
<td>Special Projects in Biology</td>
<td>1-2.0</td>
</tr>
<tr>
<td>BIOL B34</td>
<td>Pathophysiology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL B255</td>
<td>Human Anatomy &amp; Physiology Success Lab</td>
<td>0.5- 1.0</td>
</tr>
<tr>
<td>CHEM B2a</td>
<td>Introductory General Chemistry</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM B11</td>
<td>Introduction to General, Organic and Biochemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B1a</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B1b</td>
<td>General Chemistry and Chemical Analysis</td>
<td>5.0</td>
</tr>
<tr>
<td>MEDS B60</td>
<td>Medical Terminology</td>
<td>3.0</td>
</tr>
<tr>
<td>NUTR B10</td>
<td>Elementary Nutrition</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Note: Students transferring to a 4-year institution for a B.S. in Biology generally take the CHEM B1a, B1b sequence. Note: Students transferring for a B.S. in Nursing should consult the university of choice as to which chemistry sequence meets transfer needs.

**Suggested Program for Biology Majors**

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**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL B3a</td>
<td>General Biology I</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B1a</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>ENGL B1a</td>
<td>Expository Composition</td>
<td>4.0</td>
</tr>
<tr>
<td>Art or Humanities Elective</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL B3b</td>
<td>General Biology II</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B1b</td>
<td>General Chemistry and Chemical Analysis</td>
<td>5.0</td>
</tr>
<tr>
<td>ENGL B2 or</td>
<td>Advanced Composition and Critical Thinking</td>
<td>5.0</td>
</tr>
<tr>
<td>PHIL B9</td>
<td>Critical Thinking and Advanced Composition (4.0)</td>
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</tbody>
</table>

**Third Semester**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH B6a</td>
<td>Analytic Geometry and Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B2a</td>
<td>General Physics-Mechanics and Heat</td>
<td>4.0</td>
</tr>
<tr>
<td>COMM B1</td>
<td>Art or Humanities elective</td>
<td>3.0</td>
</tr>
<tr>
<td>Social or Behavioral Science elective</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>
Fourth Semester

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH B6b</td>
<td>Analytic Geometry and Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B2b</td>
<td>General Physics-Sound, Light, Electricity, Magnetism, Modern Physics</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>Art or Humanities elective</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>Social or Behavioral Science elective</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Note: Some UC campuses now require calculus-based physics for biology majors and other particular courses. If you are planning to transfer to a UC campus, contact their admissions office for advice.

BUSINESS ADMINISTRATION

The Business Department strives to promote and enhance the economic development of the community; to provide for lifelong learning and academic excellence through course content, application, and technology; to serve diverse populations with a sense of worth and dignity; to establish work ethics relative to a positive work environment; to meet workforce needs through skills development, training, and personal growth; and to communicate a sense of vision and renewal through a creative utilization of productive and innovative resources.

Accounting Associate in Arts Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

Total Units: 30.5

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD B53a</td>
<td>Introduction to Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B53b</td>
<td>Introduction to Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B54</td>
<td>Payroll Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B55</td>
<td>Computer Accounting Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B40</td>
<td>Personal Finance</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B51</td>
<td>Business Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B264</td>
<td>Ten-Key Proficiency</td>
<td>0.5</td>
</tr>
<tr>
<td>BSAD B20</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B5</td>
<td>Human Relations/People Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Note: BSAD B1 may be substituted for BSAD B53a and BSAD B53b.

Administrative Office Assistant

The Administrative Office programs are designed to provide the skills and competencies needed to become an efficient, productive member of an office support team. Courses are designed to help students learn to analyze and coordinate office duties and systems, develop proficiency in the use of integrated software, and improve oral and written communication. Emphasis is placed on non-technical as well as technical skills. Students have the option of completing certificates and/or a two-year degree program.

Office Assistant Job Skills Certificate

This certificate prepares students as entry-level office support staff. Students are urged to continue beyond the Job Skills Certificate and earn a Certificate of Achievement or Associate of Arts Degree.

Upon completion of the following courses with at least a “C” grade in each course, the student will be awarded an Office Assistant Job Skills Certificate.

Total Units: 11

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD B252abc</td>
<td>Computer Keyboarding, Parts 1-2-3</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B287</td>
<td>Filing</td>
<td>1.5</td>
</tr>
<tr>
<td>BSAD B85/B285</td>
<td>Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B264</td>
<td>Ten-Key Proficiency</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Office Assistant Certificate of Achievement

An Office Assistant Certificate of Achievement increases the student’s employability as office support staff. Students who have completed the Job Skills Certificate courses can quickly upgrade to the Certificate of Achievement by completing the following courses with at least a “C” grade.

Total Units: 27.5

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD B252abc</td>
<td>Computer Keyboarding, Parts 1-2-3</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B287</td>
<td>Filing</td>
<td>1.5</td>
</tr>
<tr>
<td>BSAD B85/B285</td>
<td>Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B280</td>
<td>Machine Transcription</td>
<td>1.5</td>
</tr>
<tr>
<td>BSAD B253abc</td>
<td>Document Processing, Part 1-2-3</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B248</td>
<td>Cooperative Work Experience Education</td>
<td>1-3.0</td>
</tr>
<tr>
<td>BSAD B20</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Administrative Office Assistant Associate in Arts Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

Designed to prepare the student for employment as office support staff to assist managers, executives, and professionals.

Total Units: 30.5

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD B252abc</td>
<td>Computer Keyboarding, Parts 1-2-3</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B253abc</td>
<td>Document Processing, Parts 1-2-3</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B287</td>
<td>Filing</td>
<td>1.5</td>
</tr>
<tr>
<td>BSAD B85/B285</td>
<td>Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B88</td>
<td>Office Procedures</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B5</td>
<td>Human Relations/People Skills</td>
<td>3.0</td>
</tr>
</tbody>
</table>
### Bookkeeping Certificate of Achievement

The Bookkeeping program provides students with the knowledge and skills necessary for employment and growth in the accounting profession. Using the “language of business,” accountants assemble and analyze, process, and communicate essential information about financial operations.

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.

**Total Units:** 25.5

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD B53a</td>
<td>Introduction to Accounting I</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B53b</td>
<td>Introduction to Accounting 2</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B54</td>
<td>Payroll Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B55</td>
<td>Computer Accounting Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B51</td>
<td>Business Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B264</td>
<td>Ten-Key Proficiency</td>
<td>0.5</td>
</tr>
<tr>
<td>BSAD B252a</td>
<td>Computer Keyboarding, Part I</td>
<td>1.0</td>
</tr>
<tr>
<td>BSAD B20</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B5</td>
<td>Human Relations/People Skills</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### Business Administration Associate in Arts Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

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.

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 the major requirements for the Associate in Arts Degree from Bakersfield College.

**Total Units:** 25 or 26

### General Business Job Skills Certificate

A Job Skills Certificate in General Business will provide the student with broad-based knowledge and skills in business. These core classes provide the foundation for a variety of successful careers in business. Students must complete courses with at least a “C” grade.

**Total Units:** 12

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD B5</td>
<td>Human Relations/People Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B20</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B5 or</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B1</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BSAD B2</td>
<td>Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>COMS B5 or</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B2 or</td>
<td>Introduction to Computer Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B3</td>
<td>Computer Concepts and Survival Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON B1</td>
<td>Principles of Economics-Micro</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON B2</td>
<td>Principles of Economics-Macro</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B23 or</td>
<td>Basic Functions and Calculus for Business</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH B2 or</td>
<td>Basic Functions and Calculus for Business</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH B6a</td>
<td>Analytic Geometry and Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B22</td>
<td>Elementary Probability and Statistics</td>
<td>5.0</td>
</tr>
</tbody>
</table>

### General Management Job Skills Certificate

The management curriculum is designed to provide the knowledge and skills necessary for success as a manager in today’s demanding organizational climate. The program benefits the individual who aspires to a management position in any organization, including business, government or service organizations.

Upon completion of the following courses with at least a “C” grade in each course, the student will be awarded a General Management Job Skills Certificate.

**Total Units:** 12

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD B61</td>
<td>Human Resources Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B65</td>
<td>Principles of Organizational Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B5</td>
<td>Human Relations/People Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B43</td>
<td>Principles of Management</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### Marketing Certificate of Achievement

The Marketing Program provides students with knowledge, techniques, and perspectives relating to the principles and practice of marketing goods and services in a global economy.

Bakersfield College’s Marketing Program helps students develop a strong understanding of the techniques used in successful business marketing. That training starts with a
strong emphasis on the relationship theory and practice in contemporary marketplaces. 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.

**Total Units: 21**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD B20</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B9</td>
<td>Fundamentals of Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B85/B285</td>
<td>Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B65</td>
<td>Principles of Organizational Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B90</td>
<td>Fundamentals of Retailing</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B5</td>
<td>Human Relations/People Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B53a or</td>
<td>Introduction to Accounting I</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B1</td>
<td>Financial Accounting (4.0)</td>
<td></td>
</tr>
</tbody>
</table>

**Marketing Associate in Arts Degree**

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

**Total Units: 24**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD B20</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B9</td>
<td>Fundamentals of Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B90</td>
<td>Fundamentals of Retailing</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B51 or</td>
<td>Business Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B23</td>
<td>Finite Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B53a &amp;</td>
<td>Introduction to Accounting I</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B53b or</td>
<td>Introduction to Accounting 2</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B1</td>
<td>Financial Accounting (4.0)</td>
<td></td>
</tr>
<tr>
<td>BSAD B5</td>
<td>Human Relations/People Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**California Real Estate Certificate of Achievement**

The Real Estate courses offered are recognized by the State of California and accepted as prerequisites for the students to sit for their licensing examinations. These courses are also available for continuing education credits. Upon completion of these courses, the students will have the knowledge to allow them to comply with real estate practice standards imposed by the Real Estate License Law and Commission rules for the State of California. Students have the option of completing certificate and/or two-year degree programs.

This certificate is 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.

**Total Units: 24**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD B20</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B9</td>
<td>Fundamentals of Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B90</td>
<td>Fundamentals of Retailing</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B51 or</td>
<td>Business Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B23</td>
<td>Finite Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B53a &amp;</td>
<td>Introduction to Accounting I</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B53b or</td>
<td>Introduction to Accounting 2</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B1</td>
<td>Financial Accounting (4.0)</td>
<td></td>
</tr>
<tr>
<td>BSAD B5</td>
<td>Human Relations/People Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**California Real Estate Associate in Arts Degree**

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

**Total Units: 24**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD B75 or</td>
<td>Real Estate Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B1 or</td>
<td>Financial Accounting (4.0)</td>
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</tr>
<tr>
<td>BSAD B53a</td>
<td>Introduction to Accounting (3.0)</td>
<td></td>
</tr>
<tr>
<td>BSAD B76</td>
<td>Real Estate Finance</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B77</td>
<td>Basic Appraisal Principles</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B78</td>
<td>Real Estate Practice</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B20</td>
<td>Introduction to Business</td>
<td>3.0</td>
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</tbody>
</table>

**Electives: at least 3 units**

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<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BSAD B71</td>
<td>Escrow Procedures</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B79</td>
<td>Real Estate Investment and Taxation</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B80</td>
<td>Basic Appraisal Procedures</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B43</td>
<td>Principles of Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B72</td>
<td>Property Management</td>
<td>3.0</td>
</tr>
<tr>
<td>WEXP B248 or</td>
<td>Cooperative Work Experience Education</td>
<td>1-4.0</td>
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<tr>
<td>WEXP B249</td>
<td>Cooperative Work Experience Education</td>
<td></td>
</tr>
<tr>
<td>BSAD B73</td>
<td>Common Interest Developments (CIDs)</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B81</td>
<td>Residential Sales Comparisons &amp; Income Approaches</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**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 broad-based knowledge and skills in retailing including grocery chains.
This foundation can be built into many successful careers. The certificate is approved by members of the Western Association of Food Chains, all the major supermarket chains in the western 13 states. It encompasses several business essentials, including the “soft skills” of management and communication required for career success in the retail food industry. Upon completion of the following courses with at least a “C” grade in each course, a student will be awarded a Retail Management Certificate of Achievement.

Total Units: 30 or 31

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM B1 or</td>
<td>Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B7</td>
<td>Organizational Communication</td>
<td></td>
</tr>
<tr>
<td>BSAD B65</td>
<td>Principles of Organizational Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B51</td>
<td>Business Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B9</td>
<td>Fundamentals of Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B43</td>
<td>Principles of Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B53a or</td>
<td>Introduction to Accounting I</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B1</td>
<td>Financial Accounting (4.0)</td>
<td></td>
</tr>
<tr>
<td>BSAD B90</td>
<td>Fundamentals of Retailing</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B5</td>
<td>Human Relations/People Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B61</td>
<td>Human Resources Management</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B6a</td>
<td>Analytic Geometry &amp; Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6b</td>
<td>Analytic Geometry &amp; Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6c</td>
<td>Calculus III</td>
<td>4.0</td>
</tr>
<tr>
<td>COMS B2</td>
<td>Introduction to Computer Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYS B4a*</td>
<td>Mechanics &amp; Wave Motion</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B4b*</td>
<td>Heat, Electricity &amp; Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B2a</td>
<td>General Physics-Mechanics &amp; Heat</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B2b</td>
<td>General Physics-Sound, Light, Electricity, Magnetism, Modern Physics</td>
<td>4.0</td>
</tr>
</tbody>
</table>

CABINETMAKING

See Woodworking

CHEMISTRY

Chemistry Associate in Science Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

The A.S. in chemistry is appropriate for students interested in transferring to a 4-year university as a major in the sciences. The major will provide students with a complete general education in math and core physical sciences as well as an introduction to some basic computer systems skills. Additionally, the degree provides the student employment opportunities within local industries as a laboratory technician.

Career opportunities in Chemistry for transfers, are varied and broad, ranging from all chemical industries, physics, all other areas of the physical sciences, engineering, and all areas of the biological sciences and allied health fields. Examples of local industries include: agriculture, geo and petrochemical businesses, analytical services and laboratories, (etc).

Total Units: 38

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM B1a</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B1b</td>
<td>General Chemistry &amp; Chemical Analysis</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B18</td>
<td>Elementary Organic Chemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B18</td>
<td>Elementary Organic Chemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH B6a</td>
<td>Analytic Geometry &amp; Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6b</td>
<td>Analytic Geometry &amp; Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6c</td>
<td>Calculus III</td>
<td>4.0</td>
</tr>
<tr>
<td>COMS B2</td>
<td>Introduction to Computer Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYS B4a*</td>
<td>Mechanics &amp; Wave Motion</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B4b*</td>
<td>Heat, Electricity &amp; Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B2a or</td>
<td>General Physics-Mechanics &amp; Heat</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B2b</td>
<td>General Physics-Sound, Light, Electricity, Magnetism, Modern Physics</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL B3b</td>
<td>General Biology II</td>
<td>5.0</td>
</tr>
<tr>
<td>BIOL B16</td>
<td>General Microbiology</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Suggested Program for Chemistry A.S. Degree

First Semester

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM B1a</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH B6a</td>
<td>Analytic Geometry &amp; Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>COMS B2</td>
<td>Introduction to Computer Information Systems</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM B1b</td>
<td>General Chemistry &amp; Chemical Analysis</td>
<td>5.0</td>
</tr>
<tr>
<td>PHYS B4a*</td>
<td>Mechanics &amp; Wave Motion</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6b</td>
<td>Analytic Geometry &amp; Calculus II</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Third Semester

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM B18</td>
<td>Elementary Organic Chemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH B6c</td>
<td>Calculus III</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B4b* or</td>
<td>*Heat, Electricity, &amp; Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B2a</td>
<td>General Physics-Mechanics &amp; Heat</td>
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Fourth Semester

<table>
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<th>Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>PHYS B4c*</td>
<td>Optics &amp; Modern Physics</td>
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</tr>
<tr>
<td>PHYS B2b</td>
<td>General Physics-SLEEMMP</td>
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</table>

Note: BIOL B3b no longer has BIOL B3a as prerequisite.

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**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM B1a</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B1b</td>
<td>General Chemistry &amp; Chemical Analysis</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH B6a</td>
<td>Analytic Geometry &amp; Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6b</td>
<td>Analytic Geometry &amp; Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6c</td>
<td>Calculus III</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B4a</td>
<td>Mechanics &amp; Wave Motion</td>
<td>4.0</td>
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<tr>
<td>PHYS B4b</td>
<td>Heat, Electricity, &amp; Magnetism</td>
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<tr>
<td>PHYS B4c</td>
<td>Optics &amp; Modern Physics</td>
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**Recommended Courses**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH B6d</td>
<td>Ordinary Differential Equations</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B2</td>
<td>Introduction to Computer Information Systems</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**CHICANO(A)/LATINO(A) STUDIES**

Chicano(a)/Latino(a) Studies is an interdisciplinary program designed to broaden the student’s understanding about the history and cultural background (politics, literature, art) of a people expected to represent the majority population in the Southwestern United States within the next generation.

A Chicano(a)/Latino(a) Studies A.A. Degree will academically prepare students planning to enter professions such as law, medicine, teaching, criminal science, journalism, business and any other that requires a liberal arts education.

*Total Units: 18*

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHST/HIST B30a</td>
<td>Early Chicano History</td>
<td>3.0</td>
</tr>
<tr>
<td>CHST/HIST B30b</td>
<td>History of Chicanos in the Southwest</td>
<td>3.0</td>
</tr>
<tr>
<td>CHST/HIST B33</td>
<td>Latin American History</td>
<td>3.0</td>
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Any one of the classes below:

<table>
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<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN B1ab</td>
<td>Elementary Spanish</td>
<td>5.0</td>
</tr>
<tr>
<td>SPAN B2ab</td>
<td>Elementary Spanish</td>
<td>5.0</td>
</tr>
<tr>
<td>SPAN B3</td>
<td>Intermediate Spanish</td>
<td>4.0</td>
</tr>
<tr>
<td>SPAN B4</td>
<td>Intermediate Spanish</td>
<td>4.0</td>
</tr>
<tr>
<td>SPAN B10</td>
<td>Spanish for Heritage Speakers</td>
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</table>

Electives: to equal at least 18 units

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHST B30e</td>
<td>Art of Latin America</td>
<td>3.0</td>
</tr>
<tr>
<td>CHST/SOCI B36</td>
<td>Sociology of the Chicano</td>
<td>3.0</td>
</tr>
<tr>
<td>MUSC B20ma</td>
<td>Mariachi Ensemble</td>
<td>1-3.0</td>
</tr>
<tr>
<td>SOCI B45</td>
<td>Minority Relations</td>
<td>3.0</td>
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</table>

**CHILD DEVELOPMENT**

**CDA (Child Development Associate)**

The CDA may be substituted for nine semester units of child development credit.

**Child Development Assistant Teacher Job Skills Certificate**

The Job Skills Certificate may be earned by students who satisfactorily complete the 6 units of course work listed below with a grade of “C” or better. This course work meets the requirements for the Child Development Assistant Teacher Permit.

Career opportunities in Child Development include Assistant Child Development Teacher.

*Total Units: 6*

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDV B36</td>
<td>Developmentally Appropriate Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B20</td>
<td>Principles and Practices</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Child Development Associate Teacher Job Skills Certificate**

The Job Skills Certificate may be earned by students who satisfactorily complete the 12 units of course work listed below with a grade of “C” or better. This course work meets the requirements for the Child Development Associate Teacher Permit. This course work also meets the Child Development requirements for a fully qualified teacher in a licensed Preschool Child Development Center or School-Age Center.

*Total Units: 12*

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDV B20</td>
<td>Principles and Practices</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B36</td>
<td>Developmentally Appropriate Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B42</td>
<td>Child, Family and Community</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B49</td>
<td>Child Health, Safety and Nutrition</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Child Development Teacher Certificate of Achievement**

The Certificate of Achievement may be earned by students who satisfactorily complete 28 units of course work listed below with a grade of “C” or better. This course work 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.

*Total Units: 28*

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDV B20</td>
<td>Principles and Practices</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B21</td>
<td>Child Growth and Development:Birth through Adolescence</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B22</td>
<td>Observation and Assessment - Birth through Adolescence</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B32</td>
<td>Teaching in a Diverse Society</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B36</td>
<td>Developmentally Appropriate Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B40</td>
<td>Creative Art, Movement, &amp; Music Activities For Young Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B42</td>
<td>Child, Family and Community</td>
<td>3.0</td>
</tr>
</tbody>
</table>
CHDV B49 | Child Health, Safety and Nutrition | 3.0
CHDV B41 | Supervised Field Experience in Early Childhood Education | 4.0

**Child Development Master Teacher Certificates of Achievement**

The Certificate of Achievement for Master Teacher may be earned by students who satisfactorily complete the required specialization courses listed below with a grade of “C” or better in addition to the courses required for the Child Development Teacher Certificate of Achievement.

**Child Development Master Teacher: Infant Toddler Certificate of Achievement**

The Certificate of Achievement for Infant Toddler may be earned by taking the 28 units of child development courses required for the Child Development Teacher Certificate of Achievement and the following courses.

*Total Units: 36*

Required Courses:
- Completion of the Child Development Teacher Certificate of Achievement (28 units) and:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDV B13c</td>
<td>Child Growth and Development: The Infant Toddler Years</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B53a</td>
<td>Early Childhood Education: Adult Supervision</td>
<td>2.0</td>
</tr>
<tr>
<td>CHDV B44</td>
<td>Infant/Toddler Care and Development with Supervised Field Experience</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Child Development Master Teacher: Special Education Certificate of Achievement**

*Total Units: 36*

Required Courses:
- Completion of the Child Development Teacher Certificate of Achievement (28 units) and:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDV B33</td>
<td>Survey of Special Education</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B52</td>
<td>Care of Infants &amp; Toddlers with Disabilities</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Child Development and Family Relations Associate in Science Degree**

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better. 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.

*Total Units: 25*

Required Courses 8 (in suggested sequential order):

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDV B20</td>
<td>Principles and Practices</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B36</td>
<td>Developmentally Appropriate Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B42</td>
<td>Child, Family and Community</td>
<td>3.0</td>
</tr>
</tbody>
</table>

The **Associate Degree** requires completion of the major (25 units) with a “C” or better grade in each course plus the completion of the General Associate Degree requirements - nutrition, children’s literature, and recommended: physical education/Dance, and music. General education requirements with a 2.0 or better GPA for a total of 60 semester units minimum.

Students interested in transferring to a 4-year university must follow the CSU-GE or IGETC transfer pattern. Contact a counselor for more information on which classes meet transfer requirements.

**COMMUNICATION**

**Communication Associate in Arts Degree**

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

The Communication Program is designed to give students communication skills in professional, personal, and public contexts. Communication classes provide life skills put to use everyday in a wide variety of circumstances whether that interaction takes place one on one or in groups large and small. An Associate in Arts Degree in Communication is an ideal springboard into future educational and professional endeavors, and it is an ideal double major for nearly every discipline and career.

*Total Units: 18*

Select 18 units from the following courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM B1</td>
<td>Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B2</td>
<td>Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B4</td>
<td>Persuasive Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B5</td>
<td>Rhetoric and Argumentation</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B6</td>
<td>Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B7</td>
<td>Organizational Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B8</td>
<td>Small Group Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B9</td>
<td>Health Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B10</td>
<td>Leadership and Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B49a</td>
<td>Communication Ambassadors</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Associate in Arts in Communication Studies for Transfer**

The Associate in Arts in Communication Studies for Transfer is intended for all students who plan to complete an AA in Communication studies. This degree is especially valuable for those students planning on completing a bachelor’s degree in Communication or a similar major at a CSU campus.
because the Associate in Arts in Communication Studies for Transfer guarantees admission to the CSU system (but not to a particular campus or major). In order to earn the Associate in Arts in Communication Studies for Transfer, students must complete a minimum of 60 required semester units of CSU-transferable coursework which includes the CSU General Education or IGETC requirements with a minimum GPA of 2.0. Students transferring to a CSU campus that does accept the Associate in Arts in Communication Studies for Transfer will be required to complete no more than 60 units after transfer to earn a bachelor’s degree (unless the major is a designated “high-unit” major). This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. No additional graduation requirements are required to complete this degree.

The Associate in Arts in Communication Studies for Transfer equips students with relational and presentation skills that provide a foundation for success throughout students’ educational careers, business careers and personal interactions. Students learn about verbal and nonverbal channels of communication that inform, persuade, manage, interpret, direct, or influence social interaction in diverse contexts. The degree introduces students to both established and contemporary theories of human communication pertaining to societal construction, maintenance, and perpetuation of acceptable patterns of communicative conduct. Students choosing this degree also acquire pragmatic communication skills enabling them to competently navigate social interaction within interpersonal, small group, public, organizational, and intercultural contexts. Students learn field-specific nomenclature as well as effective oral, listening, and critical thinking skills needed to successfully manage communication encounters in a variety of professional and personal environments. Students will be prepared in this lower division work for a baccalaureate degree in Communication Studies, Speech Communication, or a similar degree.

The successful student will be able to:

• Construct, use, and interpret messages across multiple channels to inform, persuade, manage, negotiate, relate, and generally influence each other within and across varying cultural venues.
• Identify and value disparate systems of social norms and values that influence the human communicative process.
• Understand the various theoretical and pragmatic skills that enable them to navigate social interaction within multiple interpersonal, small group, public, and intercultural contexts.
• Become familiar with both field-specific nomenclature as well as effective oral, listening, and critical thinking skills.

Core Course Required: 3 units
COMM B1* Public Speaking 3.0

Select two courses from the following: 6 units
COMM B2* Interpersonal Communication 3.0
COMM B5* Argumentation and Rhetoric 3.0
COMM B8* Small Group Communication 3.0

Select three courses from the following: 9 units
COMM B4* Persuasive Communication 3.0
COMM B6* Intercultural Communication 3.0
COMM B21 Oral Interpretation 3.0
COMM B7* Organizational Communication 3.0

The courses below should be considered to make up the additional units making a total of 60 units:
COMM B9 Health Communication 3.0
COMM B10 Communication and Leadership 3.0
ENGL B2 Advanced Composition and Critical Thinking 5.0
JRNL B1 Media and Society 3.0
JRNL B2 Beginning Reporting 3.0
PSYC B1 General Psychology 3.0
SOCI B1 Introduction to Sociology 3.0

CSU Breadth or IGETC General Education Pattern: 37-39 units
(*Courses with an asterisk can be double counted for General Education).
Total Units: 60 - completion of a General Education pattern and 18 units within the major.
No additional graduation requirements are required to complete this degree.

Communication Certificate of Achievement
The Communication Certificate is designed to enhance a student’s ability to communicate in social, professional, and relational contexts. This certificate is intended to enhance the communication skills of students from all majors and career plans. Students are required to take four classes for a total of twelve units.
Total Units: 12

Select 12 units from the following courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM B1</td>
<td>Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B2</td>
<td>Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B4</td>
<td>Persuasive Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B5</td>
<td>Rhetoric and Argumentation</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B6</td>
<td>Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B7</td>
<td>Organizational Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B8</td>
<td>Small Group Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B10</td>
<td>Leadership and Communication</td>
<td>3.0</td>
</tr>
</tbody>
</table>

COMPUTER GRAPHIC ARTS
See Digital Arts
COMPUTER STUDIES

Computer Information Systems Certificate of Achievement
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.

Total Units: Minimum of 36

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B2 or</td>
<td>Introduction to Computer Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B3</td>
<td>Computer Concepts &amp; Survival Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B10</td>
<td>Structured Program Design using Python</td>
<td>2.0</td>
</tr>
<tr>
<td>COMS B16</td>
<td>COBOL Programming Language</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B32</td>
<td>Programming with Visual Basic</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B34</td>
<td>SQL and Database Systems Design</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B37</td>
<td>Introduction to Geographic Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B82</td>
<td>CompTIA Network+ (Networking Technologies)</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B1 or</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BSAD B53a and</td>
<td>Introduction to Accounting (3)</td>
<td></td>
</tr>
<tr>
<td>BSAD B20</td>
<td>Introduction to Business (3)</td>
<td></td>
</tr>
</tbody>
</table>

Programming Emphasis -- Select 9 units from the following courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B14</td>
<td>Introduction to Programming with Java</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B25</td>
<td>Programming with C</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B35</td>
<td>OOP and Data Structures with C++</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74a</td>
<td>Web Design: Macromedia Dreamweaver</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74b</td>
<td>Web Design: HTML &amp; XML</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74c</td>
<td>Web Programming: JavaScript/CSS</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Networking Emphasis -- Select 9 units from the following courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B41</td>
<td>CompTIA Linux+</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B91</td>
<td>MSCE Administering and Supporting</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B92</td>
<td>Windows 2000 Professional (MCSE 70-210 Exam Prep)</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B93</td>
<td>Microsoft Active Directory Services (MCSE 70-219 Exam Prep)</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B95</td>
<td>MCSE Internetworking with Microsoft TCP/IP</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B100</td>
<td>Computer Hardware Diagnostics</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Business Emphasis -- Select 9 units from the following courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD B2</td>
<td>Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BSAD B20</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B22</td>
<td>Elementary Probability and Statistics</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Computer Information Systems Associate in Arts Degree
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

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.

Total Units: Minimum of 22

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B2 or</td>
<td>Introduction to Computer Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B3 or</td>
<td>Computer Concepts &amp; Survival Skills</td>
<td></td>
</tr>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B10</td>
<td>Structured Program Design using Python</td>
<td>2.0</td>
</tr>
<tr>
<td>COMS B14</td>
<td>Introduction to Programming with Java (3.0)</td>
<td></td>
</tr>
<tr>
<td>COMS B16 or</td>
<td>COBOL Programming Language</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B35</td>
<td>OOP and Data Structures with C++</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B32</td>
<td>Programming with Visual Basic</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B1</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B22</td>
<td>Elementary Probability and Statistics</td>
<td>5.0</td>
</tr>
<tr>
<td>PSYC B5</td>
<td>Elementary Statistics for the Behavioral and Social Sciences (5.0)</td>
<td></td>
</tr>
<tr>
<td>COMS B34</td>
<td>SQL and Database Systems Design</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Other Suggested Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B10</td>
<td>Structured Program Design using Python</td>
<td>2.0</td>
</tr>
<tr>
<td>COMS B25</td>
<td>Programming with C</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B35</td>
<td>OOP and Data Structures with C++</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B37</td>
<td>Introduction to Geographic Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B41</td>
<td>CompTIA Linux+</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74a</td>
<td>Web Design: Macromedia Dreamweaver</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74b</td>
<td>Web Design: HTML &amp; XML</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74c</td>
<td>Web Programming: JavaScript/CSS</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B82</td>
<td>CompTIA Network+ (Networking Technologies)</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B91</td>
<td>MCSE Administering and Supporting</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B93</td>
<td>Microsoft Active Directory Services (MCSE 70-219 Exam Prep)</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B95</td>
<td>MCSE Internetworking with Microsoft TCP/IP</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B2</td>
<td>Basic Functions and Calculus for Business</td>
<td>5.0</td>
</tr>
<tr>
<td>BSAD B2</td>
<td>Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BSAD B20</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON B1</td>
<td>Principles of Economics-Micro</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON B2</td>
<td>Principles of Economics-Macro</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B43</td>
<td>Principles of Organization and Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B9</td>
<td>Fundamentals of Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B1</td>
<td>Public Speaking</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Computer Information Systems Associate in Science Degree
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

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.

*Total Units: Minimum of 36*

### Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B2 or</td>
<td>Introduction to Computer Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B3</td>
<td>Computer Concepts &amp; Survival Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B10</td>
<td>Structured Program Design using Python</td>
<td>2.0</td>
</tr>
<tr>
<td>COMS B16</td>
<td>COBOL Programming Language</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B32</td>
<td>Programming with Visual Basic</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B14 or</td>
<td>Introduction to Programming with Java</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B35</td>
<td>OOP and Data Structures with C++</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B34</td>
<td>SQL and Database Systems Design</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B82</td>
<td>CompTIA Network+ (Networking Technologies)</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B1</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
</tbody>
</table>

### Programming Emphasis -- Select 9 units from the following courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B25</td>
<td>Programming with C</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B35</td>
<td>OOP and Data Structures with C++</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B37</td>
<td>Introduction to Geographic Information Systems (GIS)</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74a</td>
<td>Web Design: Macromedia Dreamweaver</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74b</td>
<td>Web Design: HTML &amp; XML</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74c</td>
<td>Web Programming: JavaScript/CSS</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### Networking Emphasis -- Select 9 units from the following courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B41</td>
<td>CompTIA Linux+</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B91</td>
<td>MCSE Administering and Supporting Microsoft Server 2003</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B93</td>
<td>Microsoft Active Directory Services (MCSE 70-219 Exam Prep)</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B95</td>
<td>MCSE Internetworking with Microsoft TCP/IP</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B100</td>
<td>Computer Hardware Diagnostics</td>
<td>4.0</td>
</tr>
</tbody>
</table>

### Business Emphasis -- Select 9 units from the following courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD B2</td>
<td>Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BSAD B20</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B20</td>
<td>Digital Art I - Vector Art</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### Other Suggested Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH B2</td>
<td>Basic Functions and Calculus for Business</td>
<td>5.0</td>
</tr>
<tr>
<td>ECON B1</td>
<td>Principles of Economics-Micro</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON B2</td>
<td>Principles of Economics-Macro</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B43</td>
<td>Principles of Organization and Mgt.</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B9</td>
<td>Fundamentals of Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B1</td>
<td>Public Speaking</td>
<td>3.0</td>
</tr>
</tbody>
</table>

## Certificate of Achievement

*Total Units: Minimum of 36*

### Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B2 or</td>
<td>Introduction to Computer Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B3</td>
<td>Computer Concepts &amp; Survival Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B10</td>
<td>Structured Program Design using Python</td>
<td>2.0</td>
</tr>
<tr>
<td>COMS B14</td>
<td>Introduction to Programming with Java</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B25</td>
<td>Programming with C</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B32</td>
<td>Programming with Visual Basic</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B35</td>
<td>OOP and Data Structures with C++</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B82</td>
<td>CompTIA Network+ (Networking Technologies)</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B6a</td>
<td>Analytic Geometry and Calculus I</td>
<td>4.0</td>
</tr>
</tbody>
</table>

### Electives: at least 12 units

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B14</td>
<td>Introduction to Programming with Java</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B16</td>
<td>COBOL Programming Language</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B34</td>
<td>SQL and Database Systems Design</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B37</td>
<td>Introduction to Geographic Information Systems (GIS)</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B41</td>
<td>CompTIA Linux+</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74a</td>
<td>Web Design: Macromedia Dreamweaver</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74b</td>
<td>Web Design: HTML &amp; XML</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74c</td>
<td>Web Programming: JavaScript/CSS</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B91</td>
<td>MCSE Administering and Supporting Microsoft Server 2003</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B93</td>
<td>Microsoft Active Directory Services (MCSE 70-219 Exam Prep)</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B95</td>
<td>MCSE Internetworking with Microsoft TCP/IP</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B100</td>
<td>Computer Hardware Diagnostics</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B22</td>
<td>Elementary Probability and Statistics</td>
<td>5.0</td>
</tr>
</tbody>
</table>

## Computer Science Associate in Science Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

Designed for the student who plans to transfer to California State University system or private colleges and to specialize in computer science, math, science, or engineering applications. Students will learn professional skills leading to employment and will gain a broad educational background.

*Total Units: Minimum of 37*

### Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B2 or</td>
<td>Introduction to Computer Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B3</td>
<td>Computer Concepts &amp; Survival Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B10</td>
<td>Structured Program Design using Python</td>
<td>2.0</td>
</tr>
<tr>
<td>COMS B14</td>
<td>Introduction to Programming with Java</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B25</td>
<td>Programming with C</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B32</td>
<td>Programming with Visual Basic</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B35</td>
<td>OOP and Data Structures with C++</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B82</td>
<td>CompTIA Network+ (Networking Technologies)</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B6a</td>
<td>Analytic Geometry and Calculus I</td>
<td>4.0</td>
</tr>
</tbody>
</table>

### Electives: at least 12 units

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B16</td>
<td>Programming with Java</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B36</td>
<td>Structured Program Design using Python</td>
<td>2.0</td>
</tr>
<tr>
<td>COMS B25</td>
<td>Programming with C</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B32</td>
<td>Programming with Visual Basic</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B35</td>
<td>OOP and Data Structures with C++</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B82</td>
<td>CompTIA Network+ (Networking Technologies)</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B6a</td>
<td>Analytic Geometry and Calculus I</td>
<td>4.0</td>
</tr>
</tbody>
</table>

## Computer Science Certificate of Achievement

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.
Electives: at least 12 units

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B14</td>
<td>Introduction to Programming with JAVA</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B32</td>
<td>Programming with Visual Basic</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B34</td>
<td>SQL and Database Systems Design</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B35</td>
<td>OOP and Data Structures with C++</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B41</td>
<td>CompTIA Linux+</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B82</td>
<td>CompTIA Network+</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B91</td>
<td>MCSE Administering and Supporting Microsoft Server 2003</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B92</td>
<td>Windows 2000 Professional (MCSE 70-210 Exam Prep)</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B93</td>
<td>Microsoft Active Directory Services (MCSE 70-219 Exam Prep)</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B95</td>
<td>MCSE Internetworking with Microsoft TCP/IP</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B100</td>
<td>Computer Hardware Diagnostics</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6d</td>
<td>Ordinary Differential Equations</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B6e</td>
<td>Elementary Linear Algebra</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Other Suggested Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B37</td>
<td>Introduction to Geographic Information Systems (GIS)</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74a</td>
<td>Web Design: Macromedia Dreamweaver</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74b</td>
<td>Web Design: HTML &amp; XML</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74c</td>
<td>Web Programming: JavaScript/CSS</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYS B2a</td>
<td>General Physics-Mechanics and Heat</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B2b</td>
<td>General Physics-Sound, Light</td>
<td>4.0</td>
</tr>
<tr>
<td>PHIL B7</td>
<td>Introduction to Logic</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B7</td>
<td>Basic Electronics (DC and AC)</td>
<td>4.0</td>
</tr>
</tbody>
</table>

### Web Development Certificate of Achievement

This program is designed for the student who plans to design, create and maintain Websites. The student will learn professional skills leading to employment and will gain a broad educational background. In addition, the program provides a foundation for further studies in this and other computer-related fields.

**Total Units: Minimum of 32.5**

#### Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B74a</td>
<td>Web Design: Macromedia Dreamweaver</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74b</td>
<td>Web Design: HTML &amp; XML</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74c or</td>
<td>Web Programming: JavaScript/CSS</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74e</td>
<td>Intermediate Web Development: Web</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B75b or</td>
<td>Web Programming: Active Server Pages</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B75c</td>
<td>Web Programming: PHP</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B101</td>
<td>Web Systems and Security</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B82</td>
<td>CompTIA Network+</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B20</td>
<td>Digital Art I - Vector Art</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B91</td>
<td>E - Commerce</td>
<td>1.0</td>
</tr>
<tr>
<td>BSAD B65</td>
<td>Principles of Organizational Communication</td>
<td>3.0</td>
</tr>
</tbody>
</table>

#### Design Emphasis -- Select 9 units from the following courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART B42</td>
<td>Graphic Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B40</td>
<td>Digital Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B24</td>
<td>Digital Art II - Raster Art</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B25</td>
<td>Typography</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B76a</td>
<td>Web Design: Macromedia Flash</td>
<td>3.0</td>
</tr>
<tr>
<td>JRNL B1</td>
<td>Media and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B76b</td>
<td>Web Design: Advanced Flash</td>
<td>1.5</td>
</tr>
</tbody>
</table>

#### Web Programming Emphasis -- Select 9 units from the following courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B10</td>
<td>Structured Program Design using Python</td>
<td>2.0</td>
</tr>
<tr>
<td>COMS B14</td>
<td>Introduction to Programming with Java</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B32</td>
<td>Programming with Visual Basic</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B34</td>
<td>SQL and Database Systems Design</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B79</td>
<td>Advanced Programming with Visual Basic</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B76a</td>
<td>Web Design: Macromedia Flash</td>
<td>3.0</td>
</tr>
<tr>
<td>JRNL B1</td>
<td>Media and Society</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### Web Development Associate in Science Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

This program is designed for the student who plans to design, create and maintain Websites. The student will learn professional skills leading to employment and will gain a broad educational background. In addition, the program provides a foundation for further studies in this and other computer-related fields.

**Total Units: Minimum of 26.5**

#### Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B74a</td>
<td>Web Design: Macromedia Dreamweaver</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74b</td>
<td>Web Design: HTML &amp; XML</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74c or</td>
<td>Web Programming: JavaScript/CSS</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B74e</td>
<td>Intermediate Web Development: Web</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B101</td>
<td>Web Systems and Security</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B82</td>
<td>CompTIA Network+</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B20</td>
<td>Digital Art I - Vector Art</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B91</td>
<td>E - Commerce</td>
<td>1.0</td>
</tr>
</tbody>
</table>

#### Design Emphasis -- Select 9 units from the following courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART B42</td>
<td>Graphic Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B40</td>
<td>Digital Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B24</td>
<td>Digital Art II - Raster Art</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B25</td>
<td>Typography</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B76a</td>
<td>Web Design: Macromedia Flash</td>
<td>3.0</td>
</tr>
<tr>
<td>JRNL B1</td>
<td>Media and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B76b</td>
<td>Web Design: Advanced Flash</td>
<td>1.5</td>
</tr>
</tbody>
</table>

#### Web Programming Emphasis -- Select 9 units from the following courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B10</td>
<td>Structured Program Design using Python</td>
<td>2.0</td>
</tr>
<tr>
<td>COMS B14</td>
<td>Introduction to Programming with Java</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B32</td>
<td>Programming with Visual Basic</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B34</td>
<td>SQL and Database Systems Design</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B79</td>
<td>Advanced Programming with Visual Basic</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B76a</td>
<td>Web Design: Macromedia Flash</td>
<td>3.0</td>
</tr>
<tr>
<td>JRNL B1</td>
<td>Media and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B76b</td>
<td>Web Design: Advanced Flash</td>
<td>1.5</td>
</tr>
</tbody>
</table>
CONSTRUCTION

Construction Technology Certificate of Achievement
Total Units: 32

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH B6</td>
<td>Materials of Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH B35</td>
<td>Building Codes</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST B1</td>
<td>Introduction to Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST B2</td>
<td>Estimating and Scheduling</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST B50a or</td>
<td>Residential Construction</td>
<td>6.0</td>
</tr>
<tr>
<td>CNST B50b or</td>
<td>Residential Construction</td>
<td>6.0</td>
</tr>
<tr>
<td>WEXP B249</td>
<td>Cooperative Work Experience Education</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Electives:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH B56</td>
<td>Building and Related Codes</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO B1ab</td>
<td>Introduction to Automotive Technology (CAD)</td>
<td>4.0</td>
</tr>
<tr>
<td>INDR B10</td>
<td>Introduction to Industrial Drawing and Graphics</td>
<td>1.0</td>
</tr>
<tr>
<td>INDT B10 or</td>
<td>Occupational Readiness</td>
<td>3.0</td>
</tr>
<tr>
<td>Equivalent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WOOD B2</td>
<td>Furniture and Cabinetmaking</td>
<td>3.0</td>
</tr>
</tbody>
</table>

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

Industrial Technology, Construction Option Associate in Science Degree
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

Total Units: 30

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH B55</td>
<td>Building Codes</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST B1</td>
<td>Introduction to Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST B2</td>
<td>Estimating and Scheduling</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B10</td>
<td>Introduction to Industrial Drawing and Graphics</td>
<td>1.0</td>
</tr>
<tr>
<td>INDT B10 or</td>
<td>Occupational Readiness</td>
<td>3.0</td>
</tr>
<tr>
<td>Equivalent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WEXP B249 or</td>
<td>Cooperative Work Experience Education</td>
<td>6.0</td>
</tr>
</tbody>
</table>

CORRECTIONAL ADMINISTRATION

Correctional Administration Associate in Arts Degree
This program includes classes that will guide students toward careers in law enforcement, the courts and the law, and state, local, and private corrections. These courses have been endorsed by the Joint Apprenticeship Committee of the California Department of Corrections, California Youth Authority, and the California Correctional Peace Officers Association.

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

This program includes classes that will guide students toward careers in law enforcement and policing, the courts and the law, and state, local, and private corrections.

Total Units: 24

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM B21</td>
<td>Introduction to Correctional Administration</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B23</td>
<td>Fundamentals of Interviewing &amp; Counseling</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B24</td>
<td>Probation, Parole &amp; Community Corrections</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B3</td>
<td>Community Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B8</td>
<td>Criminal Investigation</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B9</td>
<td>Juvenile Justice System</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives: at least 6 units

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM B22</td>
<td>Institutional Supervision and Treatment of the Offender</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B5</td>
<td>Community Relations</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Criminal Justice Associate in Arts Degree
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

This program includes classes that will guide students toward careers in law enforcement and policing, the courts and the law, and state, local, and private corrections.

Total Units: 24

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM B22</td>
<td>Institutional Supervision and Treatment of the Offender</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B23</td>
<td>Fundamentals of Interviewing &amp; Counseling</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B24</td>
<td>Probation, Parole &amp; Community Corrections</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B3</td>
<td>Community Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B8</td>
<td>Criminal Investigation</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B9</td>
<td>Juvenile Justice System</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM B1</td>
<td>Introduction to Criminal Justice</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B2</td>
<td>Criminal Law</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B3</td>
<td>Introduction to Evidence</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B4</td>
<td>Constitutional Criminal Procedure</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B12</td>
<td>Forensic and Scientific Aspects of Evidence</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B55</td>
<td>Special Topics in Criminal Justice</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives: at least 6 units.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM B5</td>
<td>Community Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B8</td>
<td>Criminal Investigation</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B9</td>
<td>Juvenile Justice System</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B10</td>
<td>Organized Crime</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B24</td>
<td>Probation, Parole &amp; Community Corrections</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B50</td>
<td>Criminal Justice Report Writing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**DIGITAL ARTS**

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

*Total Units: 27*

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART B1 or</td>
<td>Art Appreciation</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B2 or</td>
<td>Drawing I</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B8</td>
<td>Figure Drawing I</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B4</td>
<td>Two Dimensional Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B20</td>
<td>Digital Art I - Vector Art</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B42</td>
<td>Graphic Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B40</td>
<td>Digital Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B41</td>
<td>Advertising Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B25</td>
<td>Typography</td>
<td>3.0</td>
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</table>

Electives: at least 3 units

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART B16</td>
<td>Digital Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B17</td>
<td>Black and White Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B24</td>
<td>Digital Art II - Raster Art</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Digital Arts Associate in Arts Degree**

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

**ECONOMICS**

**Economics Associate in Arts Degree**

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

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.

*Total Units: 19*

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART B20</td>
<td>Digital Art I - Vector Art</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B42</td>
<td>Graphic Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B40</td>
<td>Digital Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B41</td>
<td>Advertising Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B24</td>
<td>Digital Art II - Raster Art</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL B1a</td>
<td>Expository Composition</td>
<td>4.0</td>
</tr>
<tr>
<td>PHIL B7</td>
<td>Introduction to Logic</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST B17b</td>
<td>History of the U.S. Since 1877</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS B1</td>
<td>American Government: National, State and local</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B1a</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B1</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BSAD B2</td>
<td>Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>COMM B1</td>
<td>Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B23</td>
<td>Finite Mathematics</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Electronics Technology Certificate of Achievement

**Total Units: 34**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELET B1</td>
<td>Basic Electronics (DC and AC)</td>
<td>4.0</td>
</tr>
<tr>
<td>ELET B5</td>
<td>Programmable Logic Controllers</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B6</td>
<td>Analog and Digital Electronics</td>
<td>4.0</td>
</tr>
<tr>
<td>ELET B55a</td>
<td>Electric Motors-Controls</td>
<td>4.0</td>
</tr>
<tr>
<td>ELET B56</td>
<td>Instrumentation &amp; Process Control</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B61</td>
<td>Telecommunications</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B62</td>
<td>Radio Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B70</td>
<td>Mechanical Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>INDT B10 or</td>
<td>Occupational Readiness</td>
<td>3.0</td>
</tr>
<tr>
<td>Equivalent</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Electives: at least 4 units

**Industrial Technology, Electronics Option Associate in Science Degree**

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

**Total Units: 35**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELET B4</td>
<td>Computer Integrated Manufacturing</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B63</td>
<td>Electronic Systems Installation</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B11</td>
<td>Introduction to Computer Aided Drafting</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>and Design (CAD)</td>
<td></td>
</tr>
<tr>
<td>MFGT B1ab</td>
<td>Machine Tool Processes</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives: at least 4 units

**Emergency Medical Technology**

**Emergency Medical Technician-1 (EMT-1)**

The Emergency Medical Technician-1 (EMT-1) course consists of 152 hours, which includes 24 hours of emergency room/ambulance experience. The course prepares the student to perform basic emergency care as part of a mobile emergency team. It also 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. Upon successful completion of the course, students are eligible to take an examination for certification as an Emergency Medical Technician 1. EMT-1’s are employed by ambulance companies and some private industries to provide emergency care in case of illness or injury. The course is required for ambulance personnel, the California Highway Patrol and many other first care providers. Students may later choose to become paramedics.

**ENROLLMENT**

Enroll through the Bakersfield College Admission and Records Office. The course is offered each fall and spring two evenings per week for 16 weeks. This is a 7.5 unit course.

**PRE-ADMISSION REQUIREMENT**

1. Each student must possess a current American Heart Association BLS -Healthcare Provider card. (Bakersfield College offers a BLS course (MEDS B52).
2. Each student must be at least 18 years of age by the completion date of the course.
3. Mandatory physical examination/immunizations and fit testing must be completed 4 weeks after start of the course. Costs of meeting health requirements are paid by the student. Failure to meet these requirements will result in student ineligibility for clinical rotations.
4. Completion of the 3 unit Medical Terminology Course (MEDS B60) is strongly recommended.

**CONDITIONAL ENROLLMENT**

As a condition of enrollment in any Allied Health Program, students are required to submit to and pass a designated drug and alcohol screening, a background screening, and physical examination clearance (at the student’s expense). Please note the following:

- A history of felony conviction(s) or any bar, exclusion or other ineligibility for federal program participation could render a student ineligible for clinical placement, as determined by the clinical agencies.
- If a student cannot obtain background clearance from the clinical agencies, it will not be possible to place the student in the clinical areas, which is a required component of the program. In the event that a student cannot obtain a background clearance, the space will be forfeited. Students who are found to be ineligible for clinical placement by the clinical agency after admission to the program shall be subject to dismissal from the program, as they will be unable to complete mandatory clinical rotations.
- A physical examination completed by a physician of the student’s choice is required after acceptance to the Program to demonstrate that a student meets the technical standards necessary to meet the Program objectives. Appropriate immunizations and/or vaccinations and fit testing are also required and are performed at the student’s expense.
More information can be found on the Allied Health website at www2.bakersfieldcollege.edu/alliedhealth/ or in the Bakersfield College Allied Health Office, MS 178.

**LICENSURE/CERTIFICATION ELIGIBILITY**

Students with a misdemeanor and/or felony arrest conviction, either current or prior, may not receive certification or licensure from the State or County. Also, proof of citizenship (social security card and certified birth certificate) and fingerprinting are required by State certification/licensure agencies. Anyone who wishes clarification may contact the Kern County Emergency Medical Services Office at (661) 868-5200. Upon successful completion of the course, students will be eligible to sit for the National Registry EMT-Basic Examination (NREMT).

**ACCREDITATION AND PROGRAM APPROVAL**

Bakersfield College is accredited by the Western Association of Schools and Colleges. The Emergency Medical Technician (EMT) Program is approved by Kern County Emergency Medical Services and meets all State and County requirements.

**Emergency Medical Technician 1 (EMT-1) Job Skills Certificate**

*Total Units: 7.5*

This certificate complies with state requirements and ensures that the student has met the local EMS (Kern County Authority) approval for county protocol training. It is also required for ambulance personnel and some other first care providers such as law enforcement and fire personnel. The certificate provides proof of successful completion of an approved EMT-1 program which is enrollment and fire personnel. The certificate provides proof of successful completion of an approved EMT-1 program which is necessary for the student to take the national licensure exam. Students must complete the required course with at least a “B” grade.

**Career Opportunities in Emergency Medical Technology**

Employment as an emergency medical technician with the fire department, hospitals, and a variety of healthcare settings statewide.

*Total Units: 7.5*

Required Course:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMTC B50</td>
<td>Emergency Medical Technician I</td>
<td>7.5</td>
</tr>
</tbody>
</table>

**ENGINEERING**

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. Career opportunities in Engineering include Junior Civil Engineer, Engineering Technician and Designer.

**Engineering Associate in Science Degree**

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

*Total Units: 47*

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH B6a</td>
<td>Analytic Geometry &amp; Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6b</td>
<td>Analytic Geometry &amp; Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6c</td>
<td>Calculus III</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6d</td>
<td>Ordinary Differential Equations</td>
<td>3.0</td>
</tr>
<tr>
<td>CHEM B1a</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>PHYS B4a</td>
<td>Mechanics &amp; Wave Motion</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B4b</td>
<td>Heat, Electricity, &amp; Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B4c</td>
<td>Optics &amp; Modern Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGR B17</td>
<td>Introduction to Electric Circuits</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR B36</td>
<td>Engineering Mechanics-Statics</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR B45</td>
<td>Properties of Materials</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR B19/C++</td>
<td>Computer Programming for Science, Engineering and Technology</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>ENGR B47</strong></td>
<td>Introduction to Engineering and Design</td>
<td>3.0</td>
</tr>
</tbody>
</table>

* May be used to also fulfill general education requirements.

**University of California, California State University and Private Universities**

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.

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. Four –year colleges and universities neither require, nor recommend, that engineering majors complete lower division general education requirements prior to transfer. Please check www.assist.org for complete transfer requirements. The following Bakersfield College courses satisfy the engineering core program:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH B6a</td>
<td>Analytic Geometry &amp; Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6b</td>
<td>Analytic Geometry &amp; Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6c</td>
<td>Calculus III</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6d</td>
<td>Ordinary Differential Equations</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYS B4a</td>
<td>Mechanics &amp; Wave Motion</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B4b</td>
<td>Heat, Electricity &amp; Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM B1a</td>
<td>General Chemistry I</td>
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</tr>
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</table>
The following courses are required to satisfy the engineering technology core and Associate in Science program:

**Total Units: 40**

### Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR B17</td>
<td>Introduction to Electric Circuits</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR B19C/C++</td>
<td>Computer Programming for Science and Engineering Technology</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR B36</td>
<td>Engineering Mechanics – Statics</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR B45</td>
<td>Properties of Materials</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR B47</td>
<td>Introduction to Engineering &amp; Design</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B6e</td>
<td>Elementary Linear Algebra</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYS B4c</td>
<td>Optics &amp; Modern Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>INDR B10</td>
<td>Introduction to Industrial Drawing &amp; Graphics</td>
<td>1.0</td>
</tr>
<tr>
<td>INDR B11</td>
<td>Introduction to Computer Aided Drafting &amp; Design (CAD)</td>
<td>1.0</td>
</tr>
<tr>
<td>CHEM B1b</td>
<td>General Chemistry &amp; Chemical Analysis</td>
<td>5.0</td>
</tr>
<tr>
<td>COMS B35</td>
<td>OOP and Data Structures with C++</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR B17L</td>
<td>Electric Circuit Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>ENGR B24</td>
<td>Engineering Graphics &amp; Descriptive Geometry</td>
<td>2.0</td>
</tr>
<tr>
<td>ENGR B37</td>
<td>Engineering Mechanics – Dynamics</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR B40</td>
<td>Surveying I</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOL B10</td>
<td>Introduction to Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL B3a</td>
<td>General Biology</td>
<td>5.0</td>
</tr>
</tbody>
</table>

The following general education courses may also be required for transfer:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL B1a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM B1, B2, or B8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHIL B7 (CSU), PHIL B9, or ENGL B2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(One) Social and Behavioral Science course</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

Cal Poly Pomona; California State University, Sacramento; California State University, Long Beach

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 (hands-on) 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 B50.

The following courses are required to satisfy the engineering technology core and Associate in Science program:

### Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENGR B47</strong></td>
<td>Introduction to Engineering and Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR B45</td>
<td>Properties of Materials</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR B24</td>
<td>Engineering Graphics and Descriptive Geometry</td>
<td>2.0</td>
</tr>
<tr>
<td>INDR B10</td>
<td>Introduction to Industrial Drawing &amp; Graphics</td>
<td>1.0</td>
</tr>
<tr>
<td>INDR B11</td>
<td>Introduction to Computer Aided Drafting and Design (CAD)</td>
<td>1.0</td>
</tr>
<tr>
<td>*CHEM B2a</td>
<td>Introductory General Chemistry</td>
<td>4.0</td>
</tr>
<tr>
<td>*PHYS B2a</td>
<td>General Physics-Mechanics and Heat</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B2b</td>
<td>General Physics-Sound, Light, Electricity, Magnetism, Modern Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>*MATH B6ab</td>
<td>Analytic Geometry and Calculus</td>
<td>8.0</td>
</tr>
<tr>
<td>ENGR B19C/C++</td>
<td>Computer Programming for Science, Engineering and Technology (C)</td>
<td>3.0</td>
</tr>
</tbody>
</table>

* May be used to also fulfill general education requirements
**Meets student development requirement

In addition, seven or more units from the following 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.

### 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 the writing course English B1a and may take a literature class to fulfill the humanities requirement. Students seeking a Baccalaureate Degree should take English B1a and may take English B1b and other literature courses to fulfill 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.

**English Associate in Arts Degree**

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

**Total Units: 18**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL B1a</td>
<td>Expository Composition</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGL B1b</td>
<td>Introduction to Types of Literature</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose 6 units from the following:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL B5a</td>
<td>Survey of English Language</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL B5b</td>
<td>Survey of English Language</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL B30a</td>
<td>Survey of American Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL B30b</td>
<td>Survey of American Literature</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives: at least 5 units

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL B2</td>
<td>Advanced Composition &amp; Critical Thinking</td>
<td>5.0</td>
</tr>
<tr>
<td>ENGL B10</td>
<td>Introduction to Shakespeare</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL B20a</td>
<td>Survey of World Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL B21</td>
<td>African-American Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL B23</td>
<td>Women’s Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL B27</td>
<td>The Bible as Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL B28</td>
<td>Classical Mythology</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL B35</td>
<td>Children’s Literature and Storytelling</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL B41a</td>
<td>Introduction to Creative Writing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**ENVIRONMENTAL HORTICULTURE**

See Agriculture

**FIRE TECHNOLOGY**

**Fire Technology Certificate of Achievement**

This certificate was developed to assist students who desire to become a firefighter, or desire Fire Technology as a career. This certificate will aid existing firefighters in promoting/advancing through the ranks of engineer, captain, battalion chief, etc. The Bakersfield Fire Department requires an A.A./A.S. Degree before a captain can take the promotional exam for battalion chief. This course of study will transfer to a four-year institute.

Note: Fire B-1 is a prerequisite and must be completed before taking other core fire technology courses. Fire B-1 can be waived if the student has completed either academy (B-62 or B-63) and B-2 can be waived for students who have a minimum of two years continuous experience as a full-time paid firefighter. A G.P.A. of at least 2.0 is required in the fire technology program. Of the 30 units required, a minimum of 12 units must be completed at Bakersfield College.

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 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 Fire Technology.

**Total Units: 32**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE B1</td>
<td>Fire Protection Organization</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B2 or</td>
<td>Personal Fire Safety &amp; Emergency Action</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B7</td>
<td>Building Construction for Fire Protection</td>
<td></td>
</tr>
<tr>
<td>FIRE B3 or</td>
<td>Fire Command, Strategy, Tactics</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B51b</td>
<td>Fire Command 1A (2.0)</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B4</td>
<td>Fire Behavior and Combustion</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B5 or</td>
<td>Fire Prevention Technology</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B51d</td>
<td>Fire Prevention 1A (2.0)</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B51e</td>
<td>Fire Prevention 1B (2.0)</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B6</td>
<td>Fire Protection Equipment &amp; Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B72h</td>
<td>Emergency Medical Technician I</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Required General Education Courses:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ENGL B50 or</td>
<td>Introduction to College Composition</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGL B1a</td>
<td>Expository Composition</td>
<td></td>
</tr>
<tr>
<td>PSYC B1a or</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOCI B1</td>
<td>Introduction to Sociology</td>
<td></td>
</tr>
<tr>
<td>COMM B1 or</td>
<td>Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B2 or</td>
<td>Interpersonal Communication</td>
<td></td>
</tr>
<tr>
<td>COMM B4 or</td>
<td>Persuasive Communication</td>
<td></td>
</tr>
<tr>
<td>COMM B8</td>
<td>Small Group Communication</td>
<td></td>
</tr>
</tbody>
</table>

*ENGL B60 may be substituted for ENGL B50 or ENGL B1a for Fire Technology Certificate of Achievement only.

Note: FIRE B1 and B2 are waived for students who have a minimum of 2 years service as a paid, full-time firefighter. A G.P.A. of at least 2.0 is required in the certificate program. Of the 30 units required, a minimum of 12 units must be completed at Bakersfield College.

**Fire Technology Associate in Arts Degree**

This degree program of study was developed to assist students who desire to become a firefighter, or desire Fire Technology as a career. This certificate will aid existing firefighters in promoting/advancing through the ranks of engineer, captain, battalion chief, etc. The Bakersfield Fire Department requires an A.A./A.S. Degree before a captain can take the promotional exam for battalion chief. This course of study will transfer to a four-year institute.

Note: Fire B-1 is a prerequisite and must be completed before taking other core fire technology courses. Fire B-1
can be waived if the student has completed either academy (B-62 or B-63) and B-2 can be waived for students who have a minimum of two years continuous experience as a full-time firefighter. A G.P.A. of at least 2.0 is required in the fire technology program. Of the 30 units required, a minimum of 12 units must be completed at Bakersfield.

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 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 Fire Technology.

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better. **Total Units: 22**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE B1</td>
<td>Fire Protection Organization</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B2 or</td>
<td>Personal Fire Safety &amp; Emergency Action</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B7</td>
<td>Building Construction for Fire Protection</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B3</td>
<td>Fire Command, Strategy, Tactics</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B4</td>
<td>Fire Behavior and Combustion</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B5</td>
<td>Fire Prevention Technology</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B6</td>
<td>Fire Protection Equipment &amp; Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B72h</td>
<td>Emergency Medical Technician</td>
<td>4.0</td>
</tr>
<tr>
<td>FIRE B51a</td>
<td>Fire Management 1A</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B51b</td>
<td>Fire Command 1A</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B51d</td>
<td>Fire Prevention 1A</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B51e</td>
<td>Fire Command 1B</td>
<td>2.0</td>
</tr>
<tr>
<td>WEXP B248 or</td>
<td>Cooperative Work Experience</td>
<td>4.0</td>
</tr>
<tr>
<td>WEXP B249</td>
<td>Cooperative Work Experience (4.0)</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Students may substitute up to 4 units of work experience credit in place of FIRE B51c and/or FIRE B51e.

**Wildland Fire Technology Associate in Science Degree**

This degree is designed for people who desire to enter or enhance their career in a state or federal wildland firefighting agency. The course material is linked with the National Multi-Agency Coordinating Group certification process. Students are given the opportunity to take several didactic and practical tests administered throughout the program to attain both state and national level wildland competencies. The core curriculum includes certification material to secure the basic wildland red card needed for employment in a wildland fire agency. Additional course work is designed to meet or exceed the National Fire Protection Association’s 1051 Standard on Wildland Fire Fighter Professional Qualifications. The elective material is designed to allow a student to obtain some degree of specialization that may tailor a student’s education to qualify for supervisor positions in a wildland organization. Students may be placed in paramilitary and physically demanding environments designed to introduce the student to the job tasks and skills required to operate in the wildland fire services. Career opportunities include the Forest Service and the Bureau of Land Management. Discharged military service personnel can use their military service time towards their career in the Forest Service or the BLM.

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better. **Total Units: 32**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE B1</td>
<td>Fire Protection Organization</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B2 or</td>
<td>Personal Fire Safety &amp; Emergency Action</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B7</td>
<td>Building Construction for Fire Protection</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B3</td>
<td>Fire Command, Strategy, Tactics</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B4</td>
<td>Fire Behavior and Combustion</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B5</td>
<td>Fire Prevention Technology</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B6</td>
<td>Fire Protection Equipment &amp; Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B72h</td>
<td>Emergency Medical Technician</td>
<td>4.0</td>
</tr>
<tr>
<td>FIRE B51c and</td>
<td>Fire Command 1B</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B51e</td>
<td>Fire Prevention 1A</td>
<td>2.0</td>
</tr>
<tr>
<td>WEXP B248</td>
<td>Cooperative Work Experience</td>
<td>4.0</td>
</tr>
<tr>
<td>WEXP B249</td>
<td>Cooperative Work Experience (4.0)</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Students may substitute up to 4 units of work experience credit in place of FIRE B51c and/or FIRE B51e.
“C” or better.

Total Units: 30

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE B25a</td>
<td>Wildland Fire Behavior</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B25b</td>
<td>Wildland Firefighter Safety &amp; Survival</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B25c</td>
<td>Wildland Fire Operations</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B25d</td>
<td>Wildland Public Information Officer, Prevention, &amp; Investigation</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B25e</td>
<td>Wildland Fire Logistics, Finance, &amp; Planning</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives: at least 15 units

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE B25f</td>
<td>Wildland Firefighter</td>
<td>4.0</td>
</tr>
<tr>
<td>FIRE B25g</td>
<td>Wildland Engine Firefighter</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B25h</td>
<td>Wildland Fire Dispatching</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B26a</td>
<td>Initial Attack Incident Commander</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Type 4 (ICT4) (S-200)</td>
<td>1.0</td>
</tr>
<tr>
<td>FIRE B26d</td>
<td>Interagency Incident Business Management (S-260)</td>
<td>1.0</td>
</tr>
<tr>
<td>FIRE B26e</td>
<td>Fire Operations in the Wildland</td>
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</tr>
<tr>
<td></td>
<td>Urban Interface (S-215)</td>
<td>1.5</td>
</tr>
<tr>
<td>FIRE B26g</td>
<td>Crew Boss (S-230)</td>
<td>1.5</td>
</tr>
<tr>
<td>FIRE B26k</td>
<td>Field Observer (S-244)</td>
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</tr>
<tr>
<td>FIRE B26m</td>
<td>Display Processor (S-245)</td>
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</tr>
<tr>
<td>FIRE B27a</td>
<td>Basic Incident Command System (I-200)</td>
<td>1.0</td>
</tr>
<tr>
<td>FIRE B27b</td>
<td>I-300 Intermediate Incident Command System (I-300)</td>
<td>1.5</td>
</tr>
<tr>
<td>FIRE B28b</td>
<td>L-280 Followership to Leadership</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Chief Officer Certification (Nfpa Standard 1021)

Certificate of Achievement

The Fire Chief Certification will prepare students currently employed in fire science occupations to qualify for promotions such as to Battalion Chief and higher. This training utilizes curricula developed by the California Fire Service Training and Education System (CFSTES, the training branch of the California State Fire Marshall) and meets California Board of Fire Services standards. Certification as a CSFM Fire Officer provides in-service fire personnel the ability to promote and advance in their careers and may provide for educational pay incentives.

Total Units: 22

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE B50a</td>
<td>Fire Command 2-Command Tactics</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B50b</td>
<td>Fire Command 2b-Scene Management at Major Incidents</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B50c</td>
<td>Fire Command 2c-High-Rise Fire Tactics</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B50d</td>
<td>Fire Command 2d-Management of Large-Scale Disasters</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B50e</td>
<td>Fire Command 2e-Wildland Fire Tactics</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B50f</td>
<td>Fire Management 2a-Organizational Development and Human Relations</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B50g</td>
<td>Fire Management 2b-Finance and Business Management for Chief Officers</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B50h*</td>
<td>Fire Management 2c-Computer Application for the Fire Service</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B50i</td>
<td>Fire Management 2d-Master Planning</td>
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</tr>
<tr>
<td>FIRE B50j</td>
<td>Fire Management 2e-Staff Assignments and Line Functions</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B50k*</td>
<td>Fire Investigation</td>
<td>2.0</td>
</tr>
</tbody>
</table>

*Courses are offered from State Fire Marshall’s Office only.

Fire Officer Certification (Nfpa Standard 1021)

Certificate of Achievement

The Fire Officer Certification will prepare students currently employed in fire science occupations to qualify for promotions such as to fire officer. This training utilizes curricula developed by the California Fire Service Training and Education System (CFSTES, the training branch of the California State Fire Marshall) and meets California Board of Fire Services standards. Certification as a CSFM Fire Officer provides in-service fire personnel the ability to promote and advance in their careers and may provide for educational pay incentives.

Total Units: 18

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE B51a</td>
<td>Fire Management 1a</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B51b</td>
<td>Fire Command 1a</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B51c</td>
<td>Fire Command 1b</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B51d</td>
<td>Fire Prevention 1a</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B51e</td>
<td>Fire Prevention 1b</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B51f</td>
<td>Fire Investigation 1a</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B51g</td>
<td>Fire Instructor 1a</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B51h</td>
<td>Fire Instructor 1b</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B51i</td>
<td>Fire Prevention 1c</td>
<td>2.0</td>
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</table>

FOODS/NUTRITION

Child Nutrition Management Certificate of Achievement

Program emphasizes quality food production, production records, nutrition standards and student service in child nutrition programs including public and private schools, childcare 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. A Sanitation Certificate such as Serv Safe or equivalent is required for this certificate.

Total Units: 24

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDSV B50</td>
<td>Introduction to the Foodservice Industry</td>
<td>2.0</td>
</tr>
<tr>
<td>FDSV B52</td>
<td>Foodservice Sanitation and Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>or</td>
<td>FDSV B55a &amp; FDSV B55c &amp; NUTR B10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foodservice Production Theory I (2.5)</td>
<td>2.0</td>
</tr>
<tr>
<td>WEXP B248</td>
<td>Cooperative Work Experience Education</td>
<td>2.0</td>
</tr>
<tr>
<td>or</td>
<td>WEXP B249</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cooperative Work Experience Education</td>
<td>2.0</td>
</tr>
<tr>
<td>ENGL</td>
<td>English Course</td>
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</tr>
<tr>
<td>COMS</td>
<td>Computer Studies Course</td>
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</table>
Electives: to equal at least 24 units

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDSV B55a</td>
<td>Foodservice Production Theory I</td>
<td>2.5</td>
</tr>
<tr>
<td>FDSV B55b</td>
<td>Foodservice Production Theory II</td>
<td>2.5</td>
</tr>
<tr>
<td>FDSV B55c</td>
<td>Foodservice Production Laboratory I</td>
<td>2.0</td>
</tr>
<tr>
<td>FDSV B55d</td>
<td>Foodservice Production Laboratory II</td>
<td>2.0</td>
</tr>
<tr>
<td>FDSV B59</td>
<td>Foodservice Production Management</td>
<td>3.0</td>
</tr>
<tr>
<td>FDSV B71</td>
<td>Servsafe Certification</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Child Nutrition Program Management Option Associate in Science Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better. Program emphasizes quality food production, production records, nutrition standards and student service in Child Nutrition Programs including public and private schools, childcare centers and day care centers. A Sanitation Certificate such as Serv Safe or equivalent is required for this A.S. Degree.

**Total Units: 30**

**Required Courses:**

<table>
<thead>
<tr>
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<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDSV B50</td>
<td>Introduction to the Foodservice Industry</td>
<td>2.0</td>
</tr>
<tr>
<td>FDSV B52</td>
<td>Foodservice Sanitation and Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>FDSV B55a</td>
<td>Foodservice Production Theory I</td>
<td>2.5</td>
</tr>
<tr>
<td>FDSV B55c</td>
<td>Foodservice Production Laboratory I</td>
<td>2.0</td>
</tr>
<tr>
<td>NUTR B10</td>
<td>Elementary Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>WEXP B248 or WEXP B249</td>
<td>Cooperative Work Experience Education</td>
<td>2.0</td>
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</table>

Electives: to equal at least 30 units

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDSV B55b</td>
<td>Foodservice Production Theory II</td>
<td>2.5</td>
</tr>
<tr>
<td>FDSV B55d</td>
<td>Foodservice Production Laboratory II</td>
<td>2.0</td>
</tr>
<tr>
<td>FDSV B59</td>
<td>Foodservice Production Management</td>
<td>3.0</td>
</tr>
<tr>
<td>FDSV B60</td>
<td>Cost Control</td>
<td>3.0</td>
</tr>
<tr>
<td>FDSV B71</td>
<td>Servsafe Certification</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Culinary Arts Certificate of Achievement

Program emphasizes quality food production and service in commercial and institutional food service 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 24.5 units from the courses listed below with a minimum grade of “C” in all required courses. A sanitation certificate such as Serv Safe or equivalent is required for this Certificate.

**Total Units: 27.5**

**Required Courses:**

Successful completion of the Servsafe exam and:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDSV B50</td>
<td>Introduction to the Foodservice Industry</td>
<td>2.0</td>
</tr>
<tr>
<td>FDSV B51</td>
<td>Food and Nutrition Orientation</td>
<td>0.5</td>
</tr>
<tr>
<td>FDSV B52</td>
<td>Foodservice Sanitation and Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>FDSV B55a</td>
<td>Foodservice Production Theory I</td>
<td>2.5</td>
</tr>
<tr>
<td>FDSV B55b</td>
<td>Foodservice Production Theory II</td>
<td>2.5</td>
</tr>
<tr>
<td>FDSV B55c</td>
<td>Foodservice Production Laboratory I</td>
<td>2.0</td>
</tr>
<tr>
<td>FDSV B55d</td>
<td>Foodservice Production Laboratory II</td>
<td>2.0</td>
</tr>
<tr>
<td>FDSV B55e</td>
<td>Advanced Foodservice Practicum</td>
<td>3.0</td>
</tr>
<tr>
<td>FDSV B55f</td>
<td>Fundamentals of Baking</td>
<td>2.0</td>
</tr>
<tr>
<td>FDSV B55i</td>
<td>Food and Nutrition Internship</td>
<td>1.0</td>
</tr>
<tr>
<td>FDSV B59</td>
<td>Foodservice Production Management</td>
<td>3.0</td>
</tr>
<tr>
<td>NUTR B10</td>
<td>Elementary Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>WEXP B248</td>
<td>Cooperative Work Experience Education</td>
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</table>

Dietetic Services Supervisor Program Certificate of Achievement

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 18.5 units from the courses listed below with a minimum grade of “C” in all required courses. A Sanitation Certificate such as Serv Safe or equivalent is required for this certificate.
Total Units: 18.5

Required Courses:
Successful completion of the Servsafe exam and:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDSV B50</td>
<td>Introduction to the Foodservice Industry</td>
<td>2.0</td>
</tr>
<tr>
<td>FDSV B52</td>
<td>Foodservice Sanitation and Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>FDSV B55a</td>
<td>Foodservice Production Theory I</td>
<td>2.5</td>
</tr>
<tr>
<td>FDSV B55c</td>
<td>Foodservice Production Laboratory I</td>
<td>2.0</td>
</tr>
<tr>
<td>NUTR B10</td>
<td>Elementary Nutrition</td>
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</tr>
<tr>
<td>NUTR B50</td>
<td>Modified Diets</td>
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<tr>
<td>FDSV B64a</td>
<td>Dietetic Service Supervisor Practicum</td>
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Foodservice Management Option Associate in Science Degree
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better. A Sanitation Certificate such as Serv Safe or equivalent is required for this A.S. Degree.

Total Units: 29.5

Required Courses:
Successful completion of the Servsafe exam and:

<table>
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<tr>
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<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDSV B50</td>
<td>Introduction to the Foodservice Industry</td>
<td>2.0</td>
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<tr>
<td>FDSV B51</td>
<td>Food &amp; Nutrition Orientation</td>
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<tr>
<td>FDSV B52</td>
<td>Foodservice Sanitation and Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>FDSV B55a</td>
<td>Foodservice Production Theory I</td>
<td>2.5</td>
</tr>
<tr>
<td>FDSV B55b</td>
<td>Foodservice Production Theory II</td>
<td>2.5</td>
</tr>
<tr>
<td>FDSV B55c</td>
<td>Foodservice Production Laboratory I</td>
<td>2.0</td>
</tr>
<tr>
<td>FDSV B55e</td>
<td>Advanced Foodservice Practicum</td>
<td>3.0</td>
</tr>
<tr>
<td>FDSV B55i</td>
<td>Food and Nutrition Internship</td>
<td>1.0</td>
</tr>
<tr>
<td>FDSV B59</td>
<td>Foodservice Production Management</td>
<td>3.0</td>
</tr>
<tr>
<td>NUTR B10</td>
<td>Elementary Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>WEXP B248</td>
<td>Cooperative Work Experience Education</td>
<td>2.0</td>
</tr>
<tr>
<td>BSAD B53a</td>
<td>Introduction to Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>SPST B201L</td>
<td>Special Projects and Studies</td>
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FORESTRY
See Agriculture

FRENCH

French Associate in Arts Degree
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

The major in French provides a linguistic and grammatical study of the French language and an in-depth examination of French culture and geography. The objective of the program is to prepare students for transfer to a four-year university. Employment opportunities for graduates include translation and foreign service. Career opportunities in French can lead to careers in teaching, translating, and foreign service.

Total Units: 20

Required Courses:

<table>
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<th>Title</th>
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<tbody>
<tr>
<td>FREN B1</td>
<td>Elementary French</td>
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<tr>
<td>FREN B2</td>
<td>Elementary French</td>
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<tr>
<td>FREN B3</td>
<td>Intermediate French</td>
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<td>FREN B4</td>
<td>Intermediate French</td>
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<tr>
<td>COMM B1</td>
<td>Public Speaking</td>
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</table>

GEOLOGY

Geology Associate in Science Degree
The major in geology is appropriate for students interested in the natural science who desire to be employable within the local petroleum industry as a geo-tech, or who plan to transfer to a 4-year university with a major in geology. The major is designed to provide students with complete general education in math and science, a well-rounded introduction to physical and historical geology, as well as an introduction to some basic engineering skills.

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

Total Units: 33

Required Courses:

<table>
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</thead>
<tbody>
<tr>
<td>GEOL B10</td>
<td>Introduction to Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOL B10L</td>
<td>Introduction to Geology Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>GEOL B11</td>
<td>Historical Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOL B11L</td>
<td>Historical Geology Laboratory</td>
<td>1.0</td>
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<tr>
<td>GEOL</td>
<td>Electives</td>
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</tr>
<tr>
<td>CHEM B1a or</td>
<td>General Chemistry I</td>
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<tr>
<td>CHEM B2a</td>
<td>Introductory General Chemistry (4.0)</td>
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<tr>
<td>INDR B10</td>
<td>Introduction to Industrial Drawing &amp; Graphics</td>
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<tr>
<td>MATH B1b</td>
<td>Precalculus II</td>
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<td>MATH BD</td>
<td>Intermediate Algebra</td>
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<tr>
<td>COMS B37</td>
<td>Introduction to Geographic Information Systems (GIS)</td>
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<tr>
<td>PHYS B2a</td>
<td>General Physics-Mechanics &amp; Heat</td>
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Suggested Program for Geology A.S. Degree

First Semester

<table>
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<th>Title</th>
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<tbody>
<tr>
<td>GEOL B10</td>
<td>Introduction to Geology</td>
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<td>GEOL B10L</td>
<td>Introduction to Geology Laboratory</td>
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<tr>
<td>INDR B10</td>
<td>Introduction to Industrial Drawing &amp; Graphics</td>
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<td>MATH BD</td>
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Second Semester

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<td>MATH B1b</td>
<td>Precalculus II</td>
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Third Semester

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<td>CHEM B2a</td>
<td>Introductory General Chemistry</td>
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<tr>
<td>COMS B37</td>
<td>Introduction to Geographic Information Systems (GIS)</td>
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Fourth Semester

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<tr>
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<tr>
<td>PHYS B2a</td>
<td>General Physics-Mechanics &amp; Heat</td>
<td>4.0</td>
</tr>
<tr>
<td>GEOL B11</td>
<td>Historical Geology</td>
<td>3.0</td>
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<tr>
<td>GEOL B11L</td>
<td>Historical Geology Laboratory</td>
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Suggested Electives

<table>
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<tbody>
<tr>
<td>ACDV B5</td>
<td>Tutor Training and Practicum</td>
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<td>ANTH B3</td>
<td>Introduction To Archaeology</td>
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<td>ART B3cd</td>
<td>Three Dimensional Design</td>
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<td>BSAD B5</td>
<td>Human Relations/People Skills</td>
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<td>GEOL B12</td>
<td>Geology of California</td>
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<td>GEOL B21</td>
<td>Topics in Geology</td>
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<td>GEOL B35a</td>
<td>Rocks and Minerals</td>
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</tr>
<tr>
<td>GEOL B35b</td>
<td>Geology of Kern County</td>
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</table>

Suggested Transfer 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 wants to transfer.

UCLA

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>CHEM B1a</td>
<td>General Chemistry I</td>
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</tr>
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<td>CHEM B1b</td>
<td>General Chemistry &amp; Chemical Analysis</td>
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<td>MATH B6a</td>
<td>Analytic Geometry &amp; Calculus I</td>
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<td>Analytic Geometry &amp; Calculus II</td>
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</tr>
<tr>
<td>PHYS B2a</td>
<td>General Physics-Mechanics &amp; Heat</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B2b</td>
<td>General Physics-Sound, Light, Electricity, Magnetism, Modern Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL B3a</td>
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San Diego State University

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<td>GEOL B10L</td>
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<td>CHEM B1a</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B1b</td>
<td>General Chemistry &amp; Chemical Analysis</td>
<td>5.0</td>
</tr>
<tr>
<td>BIOL B11</td>
<td>Concepts of Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6a</td>
<td>Analytic Geometry &amp; Calculus I</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Recommended Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDR B10</td>
<td>Introduction to Industrial Drawing &amp; Graphics</td>
<td>1.0</td>
</tr>
<tr>
<td>MATH B6b</td>
<td>Analytic Geometry &amp; Calculus II</td>
<td>4.0</td>
</tr>
</tbody>
</table>

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. Many employers value the writing and thinking skills acquired by History majors. The knowledge gained in history is fundamental for an understanding of many of the other fields of learning.

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 core requirements.

History Associate in Arts Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

Total Units: 18

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST B4ab or</td>
<td>European Civilization</td>
<td>6.0</td>
</tr>
<tr>
<td>HIST B1 and</td>
<td>World History from the Origins of Civilizations to 1500 (3.0)</td>
<td></td>
</tr>
<tr>
<td>HIST B2</td>
<td>History of the World Since 1500 (3.0)</td>
<td></td>
</tr>
</tbody>
</table>

AND one of the following:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST B17ab</td>
<td>History of the U.S.</td>
<td>6.0</td>
</tr>
<tr>
<td>HIST B20ab</td>
<td>African American History of the United States</td>
<td>6.0</td>
</tr>
<tr>
<td>HIST B30ab</td>
<td>Chicano History</td>
<td>6.0</td>
</tr>
</tbody>
</table>

AND any two of the following courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON B2</td>
<td>Principles of Economics-Macro</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST B25</td>
<td>Introduction to Women in American History</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST B18</td>
<td>History of California</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST B36</td>
<td>History of Native American Indians</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG B1</td>
<td>Physical Elements of Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS B1</td>
<td>American Government: National, State and local</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS B2</td>
<td>Comparative Government</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS B3</td>
<td>International Politics</td>
<td>3.0</td>
</tr>
<tr>
<td>SOCI B1</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST B3</td>
<td>Modern Global Societies</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST B33</td>
<td>Latin American History</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST B15</td>
<td>Civilizations of the Middle East</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Recommended Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL B2</td>
<td>Advanced Composition and Critical Thinking</td>
<td>5.0</td>
</tr>
<tr>
<td>PHIL B6a</td>
<td>Introduction to Philosophy</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B1a</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH B2</td>
<td>Cultural Anthropology</td>
<td>3.0</td>
</tr>
</tbody>
</table>
HUMAN SERVICES

Human Services Job Skills Certificate
The Human Service certificate emphasizes classroom instruction as well as hands-on-experience through interning with community Human Services agencies. The field of Human Services is very broad. It is concerned with meeting human needs and improving the overall quality of people’s lives. The field is interdisciplinary, meaning that knowledge from a variety of other fields of study is applied to the overall goal of helping people.

Upon completion of the following courses with at least a “C” grade in each course, the student will be awarded a Human Services Job Skills Certificate.

Total Units: 15

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL B50</td>
<td>Introduction to College Composition</td>
<td>4.0</td>
</tr>
<tr>
<td>HMSV B40</td>
<td>Introduction to Human Services</td>
<td>3.0</td>
</tr>
<tr>
<td>HMSV B5</td>
<td>Human Services Internship</td>
<td>2.0</td>
</tr>
<tr>
<td>SOCI B1</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Human Services Associate in Arts Degree
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

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. The field is interdisciplinary with the overall career goal of helping people.

Total Units: 19

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMSV B40</td>
<td>Introduction to Human Services</td>
<td>3.0</td>
</tr>
<tr>
<td>SOCI B1</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOCI B45</td>
<td>Minority Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B1a</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B40 or</td>
<td>Introduction to Lifespan Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B21</td>
<td>Child Growth and Development: Birth</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Through Adolescence</td>
<td></td>
</tr>
</tbody>
</table>

In addition, a total of four units of HMSV B5 is required. Two units are permitted in a given semester. All units must be completed in agencies where assignment and supervision is approved by the Program Coordinator. Students wishing to enroll in HMSV B5 must have completed HMSV B40.

Course Number | Title                                   | Units |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HMSV B5</td>
<td>Human Services Internship</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Electives: at least 11 units

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH B1</td>
<td>Physical Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH B2</td>
<td>Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH B5</td>
<td>North American Indians</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B1b</td>
<td>Biological Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B2</td>
<td>Interpersonal &amp; Group Process Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B5</td>
<td>Elementary Statistics for the</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>Behavioral and Social Sciences</td>
<td></td>
</tr>
<tr>
<td>PSYC B20 or</td>
<td>Social Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOCI B20</td>
<td>Social Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B30</td>
<td>Human Sexuality</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B33</td>
<td>Psychology of Personal and Social</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjustment</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B45</td>
<td>Principles of Learning and Behavior</td>
<td>3.0</td>
</tr>
<tr>
<td>HMSV B5</td>
<td>Human Services Internship</td>
<td>1.4.0</td>
</tr>
<tr>
<td>SOCI B2</td>
<td>Problems of Modern Society</td>
<td>3.0</td>
</tr>
<tr>
<td>SOCI B28</td>
<td>Women in the World</td>
<td>3.0</td>
</tr>
<tr>
<td>SOCI B36</td>
<td>Sociology of the Chicano</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B2 or</td>
<td>Introduction to Computer</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>Information Systems</td>
<td></td>
</tr>
<tr>
<td>COMS B52a or</td>
<td>Introduction to the Microcomputer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and Windows (1.5)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Any computer related course</td>
<td></td>
</tr>
<tr>
<td>SPAN B1ab</td>
<td>Elementary Spanish</td>
<td>5.0</td>
</tr>
</tbody>
</table>
COMS B2 and COMS B5 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.

INDUSTRIAL DRAWING

AutoCAD Job Skills Certificate
This certificate covers the principles of industrial drawing/CAD with the emphasis on using the AutoCAD software package from basic 2D principles through 3D solid modeling to obtain graphic solutions, design refinements, modifications and delineations. Software customization is also emphasized. Career opportunities include drafter, CAD operator, engineering tech, CAD manager, and architecture CAD operator.

Upon completion of the following courses with at least a “C” grade in each course, the student will be awarded an AutoCAD Job Skills Certificate.

Total Units: 8

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDR B10</td>
<td>Introduction to Industrial Drawing and Graphics</td>
<td>1.0</td>
</tr>
<tr>
<td>INDR B11</td>
<td>Introduction to Computer Aided Drafting and Design (CAD)</td>
<td>1.0</td>
</tr>
<tr>
<td>INDR B20a</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B20b</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Industrial Drawing Associate in Arts Degree
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

Total Units: 20

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDR B10</td>
<td>Introduction to Industrial Drawing and Graphics</td>
<td>1.0</td>
</tr>
<tr>
<td>INDR B11</td>
<td>Introduction to Computer Aided Drafting and Design (CAD)</td>
<td>1.0</td>
</tr>
<tr>
<td>INDR B20a</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B20b</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH BD</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>INDR B50</td>
<td>Process Piping</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B51</td>
<td>Electrical Design</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B52</td>
<td>Geographic Information Systems (GIS)</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives: at least 3 units

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH B16</td>
<td>Digital Tools for Graphics Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B20b</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Industrial Technology, Industrial Drawing Option Associate in Science Degree
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

Total Units: 30

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDR B10</td>
<td>Introduction to Industrial Drawing and Graphics</td>
<td>1.0</td>
</tr>
<tr>
<td>INDR B11</td>
<td>Introduction to Computer Aided Drafting and Design (CAD)</td>
<td>1.0</td>
</tr>
<tr>
<td>INDR B20a</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B20b</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B40</td>
<td>Parametric Modeling Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B50</td>
<td>Process Piping</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH BD</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>INDR B51</td>
<td>Electrical Design</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B52</td>
<td>Geographic Information Systems (GIS)</td>
<td>3.0</td>
</tr>
<tr>
<td>MFGT B1ab</td>
<td>Machine Tool Processes</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B2</td>
<td>Furniture and Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR B24</td>
<td>Engineering Graphics and Descriptive Geometry</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B1a</td>
<td>Introduction to Oxygen Acetylene Welding and Cutting</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B1b</td>
<td>Introduction to the Welding Processes</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Suggested Program for Industrial Technology Industrial Drawing Option Associate in Science Degree
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

First Semester

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDR B10</td>
<td>Introduction to Industrial Drawing and Graphics</td>
<td>1.0</td>
</tr>
<tr>
<td>INDR B11</td>
<td>Introduction to Computer Aided Drafting and Design (CAD)</td>
<td>1.0</td>
</tr>
<tr>
<td>MATH BD</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDR B20a</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH BD</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>INDR B50 or INDR B52</td>
<td>Geographic Information Systems (GIS)</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Third Semester

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDR B50 or INDR B52</td>
<td>Process Piping</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B51</td>
<td>Electrical Design</td>
<td>3.0</td>
</tr>
</tbody>
</table>

BAKERSFIELD COLLEGE PROGRAMS OF STUDY
Fourth Semester

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B40</td>
<td>Parametric Modeling Fundamentals</td>
<td>3.0</td>
</tr>
</tbody>
</table>

INDUSTRIAL TECHNOLOGY

Industrial Technology (General) Associate in Science Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

Total Units: 30

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFGT B1ab</td>
<td>Machine Tool Processes</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B1</td>
<td>Basic Electronics (DC and AC)</td>
<td>4.0</td>
</tr>
<tr>
<td>INDR B10</td>
<td>Introduction to Industrial Drawing and</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>Graphics</td>
<td></td>
</tr>
<tr>
<td>INDR B11</td>
<td>Introduction to Computer Aided Drafting</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>and Design (CAD)</td>
<td></td>
</tr>
<tr>
<td>INDR B20a</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>INDT B10</td>
<td>Occupational Readiness</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD B1a</td>
<td>Introduction to Oxygen Acetylene Welding</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>and Cutting</td>
<td></td>
</tr>
<tr>
<td>WELD B1b</td>
<td>Introduction to the Welding Processes</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Electives: at least 3 units

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDR B20b</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>MFGT B2</td>
<td>CNC Lathe Programming &amp; Operation</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B2</td>
<td>Furniture and Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO B1ab</td>
<td>Introduction to Automotive Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>CNST B1</td>
<td>Introduction to Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
</tbody>
</table>

JOURNALISM

Journalism Associate in Arts Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

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

Total Units: 18

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRNL B1</td>
<td>Media and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>JRNL B2</td>
<td>Beginning Reporting</td>
<td>3.0</td>
</tr>
<tr>
<td>JRNL B15</td>
<td>Press Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>JRNL B16</td>
<td>Multimedia Reporting</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Select 6 units from the following courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRNL B27a</td>
<td>Newspaper Production/Reporters</td>
<td>3-6.0</td>
</tr>
<tr>
<td>JRNL B27e</td>
<td>Newspaper Production/Photographers</td>
<td>3-6.0</td>
</tr>
<tr>
<td>JRNL B26</td>
<td>Newspaper Production/Editors</td>
<td>4.0</td>
</tr>
</tbody>
</table>

LIBERAL ARTS

Liberal Arts Associate in Arts Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

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 by completing one of the two 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.

Select one of the following options:

1. Option One.
   a. Complete the Intersegmental General Education Transfer Curriculum (IGETC) with a “C” GPA.
   b. Complete at least 18 units from recommended lower division major preparation for the major at the approved university of your choice with a “C” grade in each course.
   c. UC transferable elective units, if needed, to total 60 units.

OR

2. Option Two.
   a. Complete CSU General Education Breadth with a “C” GPA.
   b. Complete at least 18 units from recommended lower division major preparation for the major at the approved university of your choice with a “C” grade in each course.
   c. CSU transferable elective units, if needed, to total 60 units.

LIBERAL STUDIES

Liberal Studies Associate in Arts Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

Courses listed are based on information available at the time of publication of this catalog for the Liberal Studies Major Credential Track at CSU Bakersfield and are intended for students who plan to obtain a multiple subjects teaching
credential. Students are advised to see a counselor for the most current requirements for a Liberal Studies major at CSU Bakersfield. Students transferring to other colleges or universities are advised to consult the catalog of the school they plan to attend. This degree is articulated directly with CSU Bakersfield and may not be applicable to any other CSU. Total Units: 18

Select 18 units from the courses in Areas One through Eight:

### AREA One: Language

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL B1a</td>
<td>Expository Composition</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGL B1b or</td>
<td>Introduction to Types of Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL B10</td>
<td>Introduction to Shakespeare</td>
<td></td>
</tr>
<tr>
<td>ENGL B21 or</td>
<td>African American Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL B23 or</td>
<td>Women’s Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL B30a or</td>
<td>Survey of American Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL B30b or</td>
<td>Survey of American Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL B35</td>
<td>Children's Literature and Storytelling</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### AREA Two: Mathematics

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH B4a</td>
<td>Mathematics for Elementary School Teaching I</td>
<td>5.0</td>
</tr>
</tbody>
</table>

### AREA Three: Sciences

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL B11</td>
<td>Concepts of Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>PHSC B12</td>
<td>General Physical Science</td>
<td>4.0</td>
</tr>
<tr>
<td>ERSC B10</td>
<td>Introduction to Earth Science</td>
<td>3.0</td>
</tr>
<tr>
<td>ERSC B10L</td>
<td>Earth Science Laboratory</td>
<td>1.0</td>
</tr>
</tbody>
</table>

### AREA Four: Humanities and Social Sciences

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST B17a</td>
<td>History of the United States</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS B1</td>
<td>American Government: National, State, and Local</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST B18</td>
<td>History of California</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST B1</td>
<td>World History from the Origins of Civilizations to 1500</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG B2</td>
<td>Human Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL B7 or</td>
<td>Introduction to Logic</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL B9 or</td>
<td>Critical Thinking and Advanced Composition</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B5</td>
<td>Rhetoric and Argumentation</td>
<td></td>
</tr>
</tbody>
</table>

### AREA Five: Visual and Performing Arts

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART B1 or</td>
<td>Art Appreciation</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B2 or</td>
<td>Drawing I</td>
<td></td>
</tr>
<tr>
<td>ART B35 or</td>
<td>Survey of Western Art I</td>
<td></td>
</tr>
<tr>
<td>ART B36 or</td>
<td>Survey of Western Art II</td>
<td></td>
</tr>
<tr>
<td>MUSC B2 or</td>
<td>Basic Elements of Music</td>
<td></td>
</tr>
<tr>
<td>MUSC B22 or</td>
<td>Music Appreciation</td>
<td></td>
</tr>
<tr>
<td>THEA B1 or</td>
<td>Introduction to Acting</td>
<td></td>
</tr>
<tr>
<td>THEA B20</td>
<td>A Survey of Theatre and the Roots of Entertainment</td>
<td></td>
</tr>
</tbody>
</table>

### AREA Six: Health and Physical Education

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLED B1</td>
<td>Principles of Health Education</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### AREA Seven: Human Development

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*PSYC B1a or</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B40 or</td>
<td>Introduction to Lifespan Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B21</td>
<td>Child Growth &amp; Development: Birth through Adolescence</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### AREA Eight: Ethnic, Gender, Cultural and Handicapped Perspectives

No course articulated.

### AREA Nine: Introductory Field Experience and Technology

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC B24</td>
<td>Early Field Experience for Elementary Teachers</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### MANAGEMENT

See Business Administration

### MANUFACTURING/MACHINE TECHNOLOGY

#### Basic Machine Tool Operations-Lathe, Mill Job Skills Certificate

This certificate covers the principles of machine tool technology to include the use of precision measuring, drilling machines, saws, lathes and milling machines.

Upon completion of the following courses with at least a “C” grade in each course, the student will be awarded a Basic Machine Tool Operations-Lathe, Mill Job Skills Certificate. Total Units: 3

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFGT B1ab</td>
<td>Machine Tool Processes</td>
<td>3.0</td>
</tr>
</tbody>
</table>

#### Computer Numerical Control Programming Job Skills Certificate

This certificate covers the principles of set-up, operation and programming of computer numerical control (CNC) lathes and milling machines.

Upon completion of the following courses with at least a “C” grade in each course, the student will be awarded a Computer Numerical Control Programming Job Skills Certificate. Total Units: 6

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFGT B2</td>
<td>CNC Lathe Programming &amp; Operation</td>
<td>3.0</td>
</tr>
<tr>
<td>MFGT B3</td>
<td>CNC Mill Programming</td>
<td>3.0</td>
</tr>
</tbody>
</table>
### Control Systems Technology Certificate of Achievement

**Total Units: 31**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B10</td>
<td>Introduction to Industrial Drawing and Graphics</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B11</td>
<td>Introduction to Computer Aided Drafting &amp; Design (CAD)</td>
<td>1.0</td>
</tr>
<tr>
<td>INDT B10</td>
<td>Occupational Readiness</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B5</td>
<td>Programmable Logic Controllers</td>
<td>3.0</td>
</tr>
<tr>
<td>TECM B52</td>
<td>Introduction to Technical Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B1</td>
<td>Basic Electronics (DC and AC)</td>
<td>4.0</td>
</tr>
<tr>
<td>ELET B55a</td>
<td>Electric Motors -- Controls</td>
<td>4.0</td>
</tr>
<tr>
<td>ELET B56</td>
<td>Instrumentation and Process Control</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Electives: at least 6 units**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELET</td>
<td>Electives</td>
<td>6.0</td>
</tr>
</tbody>
</table>

### Industrial Technology, Control Systems Technology Associate in Science Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

**Total Units: 28**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS B5</td>
<td>Introduction to Microsoft Office 2010</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B10</td>
<td>Introduction to Industrial Drawing and Graphics</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B11</td>
<td>Introduction to Computer Aided Drafting &amp; Design (CAD)</td>
<td>1.0</td>
</tr>
<tr>
<td>INDT B10</td>
<td>Occupational Readiness</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B5</td>
<td>Programmable Logic Controllers</td>
<td>3.0</td>
</tr>
<tr>
<td>TECM B52</td>
<td>Introduction to Technical Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B1</td>
<td>Basic Electronics (DC and AC)</td>
<td>4.0</td>
</tr>
<tr>
<td>ELET B55a</td>
<td>Electric Motors -- Controls</td>
<td>4.0</td>
</tr>
<tr>
<td>ELET B56</td>
<td>Instrumentation and Process Control</td>
<td>3.0</td>
</tr>
<tr>
<td>COMS B82</td>
<td>MCSE/CNE Networking Technologies - Network+</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Electives: at least 7 units**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDR B20a</td>
<td>Computer Aided Drafting and Design</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B40</td>
<td>Parametric Modeling Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>INDT B273</td>
<td>Special Problems in Tool Metal Working</td>
<td>2-3.0</td>
</tr>
<tr>
<td>WELD B74a</td>
<td>Introduction to GMAW (Gas Metal Arc Welding) and FCAW (Flux Core Arc Welding)</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B74b</td>
<td>Introduction to GTAW (Gas Tungsten Arc Welding)</td>
<td>2.0</td>
</tr>
<tr>
<td>WEXP B249</td>
<td>Cooperative Work Experience Education</td>
<td>1.0</td>
</tr>
</tbody>
</table>

### Manufacturing Technology Certificate of Achievement

**Total Units: 30**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFGT B1ab</td>
<td>Machine Tool Processes</td>
<td>3.0</td>
</tr>
<tr>
<td>MFGT B2</td>
<td>CNC Lathe Programming &amp; Operation</td>
<td>3.0</td>
</tr>
<tr>
<td>MFGT B3</td>
<td>CNC Mill Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B10</td>
<td>Introduction to Industrial Drawing and Graphics</td>
<td>1.0</td>
</tr>
<tr>
<td>INDR B11</td>
<td>Introduction to Computer Aided Drafting &amp; Design (CAD)</td>
<td>1.0</td>
</tr>
<tr>
<td>TECM B52 or MATH BA or equivalent</td>
<td>Introduction to Technical Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>INDT B10 or</td>
<td>Occupational Readiness</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Electives: at least 3 units**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND B20a</td>
<td>Computer Aided Drafting and Design</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B40</td>
<td>Parametric Modeling Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>INDT B273</td>
<td>Special Problems in Tool Metal Working</td>
<td>2-3.0</td>
</tr>
<tr>
<td>WELD B53ab</td>
<td>Shielded Metal Arc Welding</td>
<td>4.0</td>
</tr>
<tr>
<td>WELD B74a</td>
<td>Introduction to GMAW (Gas Metal Arc Welding) and FCAW (Flux Core Arc Welding)</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B74b</td>
<td>Introduction to GTAW (Gas Tungsten Arc Welding)</td>
<td>2.0</td>
</tr>
<tr>
<td>WEXP B249</td>
<td>Cooperative Work Experience Education</td>
<td>1.0</td>
</tr>
</tbody>
</table>

### MARKETING

*See Business Administration*

### MATHEMATICS
**MATHEMATICS**

**Mathematics Associate in Arts Degree**

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better. This degree represents the standard freshman and sophomore level classes for a mathematics major. Career opportunities include teaching, actuarial, and statistics.

**Total Units: 18**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH B6a</td>
<td>Analytic Geometry and Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6b</td>
<td>Analytic Geometry and Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6c</td>
<td>Calculus III</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6d</td>
<td>Ordinary Differential Equations</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B6e</td>
<td>Elementary Linear Algebra</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Recommended Courses**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL B7</td>
<td>Introduction to Logic</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYS B4a</td>
<td>Mechanics and Wave Motion</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGR B19C/C++</td>
<td>Computer Programming for Science, Engineering and Technology (C)</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B21</td>
<td>Special Projects in Mathematics</td>
<td>1-2.0</td>
</tr>
<tr>
<td>MATH B22</td>
<td>Elementary Probability and Statistics</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**MUSIC**

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

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. Career opportunities in music include performer, conductor, composer, arranger, recording artist, recording engineer, critic, musicologist, theorist, private teacher, single-subject teacher, professor, copyist, church musician, music therapist, sound technician, tour manager, and agent.

**Music Associate in Arts Degree**

**Total Units: 24-26**

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC B4a</td>
<td>Elementary Theory</td>
<td>3.0</td>
</tr>
<tr>
<td>MUSC B4b</td>
<td>Elementary Theory</td>
<td>3.0</td>
</tr>
<tr>
<td>MUSC B5a</td>
<td>Class Piano</td>
<td>1.0</td>
</tr>
<tr>
<td>MUSC B5b</td>
<td>Class Piano</td>
<td>1.0</td>
</tr>
<tr>
<td>MUSC B15a</td>
<td>Ear Training and Sight Singing</td>
<td>1.0</td>
</tr>
<tr>
<td>MUSC B15b</td>
<td>Ear Training and Sight Singing</td>
<td>1.0</td>
</tr>
<tr>
<td>MUSC B21a</td>
<td>History of Music</td>
<td>3.0</td>
</tr>
<tr>
<td>MUSC B21b</td>
<td>History of Music</td>
<td>3.0</td>
</tr>
<tr>
<td>MUSC B4c</td>
<td>Intermediate Theory-Contemporary Materials</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Other Suggested Courses**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC B10ad</td>
<td>Concert Band</td>
<td>4.0</td>
</tr>
<tr>
<td>MUSC B12ad</td>
<td>College Orchestra</td>
<td>4.0</td>
</tr>
<tr>
<td>MUSC B13ad</td>
<td>Jazz Ensemble</td>
<td>4.0</td>
</tr>
<tr>
<td>MUSC B14ad</td>
<td>College Choir</td>
<td>6.0</td>
</tr>
<tr>
<td>MUSC B18ad</td>
<td>Drum Line</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**NURSING**

See also Registered Nursing, LVN-RN Program, Vocational Nursing, Nurse Assistant

**Associate Degree Nursing Program**

**Total Units: 41**

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

**Mission**

The mission of the Bakersfield College Associate Degree Nursing Program is to prepare entry-level registered nurses as providers and managers of care across the health/illness continuum and as members within the profession. Graduate nurses will collaborate with members of the health care team, be effective communicators, be politically aware, and demonstrate a commitment to life long learning.

**Application Procedure**

The Allied Health office must receive all application forms and transcripts during the designated filing periods. For detailed information on the application period and procedures, please refer to the Allied Health web site at www2.bakersfieldcollege.edu/allied health/ or come by the Bakersfield College Allied Health Office in MS 178.

**Conditional Enrollment**

As a condition of enrollment in any Allied Health Program,
students are required to submit to and pass a designated drug and alcohol screening, a background screening, and physical examination clearance (at the student’s expense). Please note the following:

• A history of felony conviction(s) or any bar, exclusion or other ineligibility for federal program participation could render a student ineligible for clinical placement, as determined by the clinical agencies.

• If a student cannot obtain background clearance from the clinical agencies, it will not be possible to place the student in the clinical areas, which is a required component of the program. In the event that a student cannot obtain a background clearance, the space will be forfeited. Students who are found to be ineligible for clinical placement by the clinical agency after admission to the program shall be subject to dismissal from the program, as they will be unable to complete mandatory clinical rotations.

• A physical examination completed by a physician of the student’s choice is required after acceptance to the Program to demonstrate that a student meets the technical standards necessary to meet the Program objectives. Appropriate immunizations and/or vaccinations and fit testing are also required and are performed at the student’s expense. More information can be found on the Allied Health website at www2.bakersfieldcollege.edu/alliedhealth/ or in the Bakersfield College Allied Health Office, MS 178.

Program Costs
An estimated cost for the first semester of the program is approximately $2,500.

Program Approval/Accreditation
The California Board of Registered Nursing approves the Bakersfield College Associate Degree Nursing Program. The Western Association of Schools and Colleges accredits Bakersfield College.

Licensure/Certification Eligibility
Record of any misdemeanor and/or felony is subject to review by the Board of Registered Nursing before a RN license may be granted. Anyone who wishes clarification may contact the Board of Registered Nursing, PO Box 944210, Sacramento, CA 94244. Applicants for RN Licensure must submit a valid Social Security number at the time of application.

Career Opportunities in Registered Nursing
Employment in a variety of healthcare facilities and settings.

Prerequisite Requirements
All prerequisites must be completed with a “C” grade or higher.

• ENGL B1A (Expository Composition) 4 units at Bakersfield College or equivalent course at another accredited college.

• MATH BD (Intermediate Algebra) or higher, 3 units at Bakersfield College or an equivalent course at another accredited college.

• CHEM B11 (Introduction to General, Organic and Biochemistry) or CHEM B2a (Introductory General Chemistry) or CHEM B1a (General Chemistry) a minimum of 3-4 units is required at Bakersfield College or an equivalent course at another accredited college. (CSUB requires Chem B11)

• BIOL B16 (General Microbiology) 5 units at Bakersfield College or equivalent course at another accredited college.

and

• BIOL B32 (Human Anatomy and Physiology I) 4 units at Bakersfield College or equivalent course at another accredited college.

and

• BIOL B33 (Human Physiology and Anatomy II) 4 units at Bakersfield College or equivalent course at another accredited college.

or

• Human Anatomy (minimum 4 units) equivalent course at another accredited college

and

• Human Physiology (minimum 4 units) equivalent course at another accredited college.

General Education Courses
General education courses are required to graduate from Bakersfield College with an Associate Degree in Nursing. It is suggested that most of these courses be completed prior to beginning the Nursing Program.

• Social Science (3 units) – Any course listed in Area A of the Bakersfield College Catalog.

• Arts, Literature, Philosophy, and Foreign Language (3 units) - Any course listed in area C in the Bakersfield College Catalog.

• *SOCI B1 or *ANTH B2

• *PSYC B1A

• *COMM B1 (COMM B1 is required for CSUB transfer) or *COMM B2

• Physical Education (1 unit)

• (A student development course is recommended to be taken during the first semester of courses at Bakersfield College to assure priority registration.)

• NURS B100 or STDV B1, STDV B2, STDV B3, STDV B6

• Health Education (waived for RN students)

Note: All graduation requirements of the college must be met to earn an Associate of Science (A.S.) in Nursing and to take the NCLEX RN – Licensure Exam.

*Board of Registered Nursing requirement
Recommended Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS B100</td>
<td>Strategies for Success in a Nursing Program</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>(this course should be taken one or two semesters prior to entering the Program). Nurse Assistant Certification (information available upon request)</td>
<td></td>
</tr>
<tr>
<td>MEDS B69</td>
<td>Nurse Assistant</td>
<td>6.0</td>
</tr>
<tr>
<td>MEDS B60</td>
<td>Medical Terminology</td>
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</table>

highly recommended, prior to taking BIOL B32.

Associate Degree Nurse Program Curriculum

**First Semester**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>NURS B20</td>
<td>Fundamentals of Nursing</td>
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<td>NURS B21</td>
<td>Medical Surgical Nursing 1</td>
<td>5.0</td>
</tr>
<tr>
<td>NURS B22</td>
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**Second Semester**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
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<tbody>
<tr>
<td>NURS B23</td>
<td>Medical Surgical Nursing 2</td>
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<tr>
<td>NURS B24</td>
<td>Obstetrics - Maternity Nursing</td>
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</tr>
<tr>
<td>NURS B25</td>
<td>Mental Health- Psychiatric Nursing</td>
<td>3.5</td>
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**Third Semester**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>NURS B26</td>
<td>Medical Surgical Nursing 3</td>
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<tr>
<td>NURS B27</td>
<td>Pediatric Nursing</td>
<td>3.5</td>
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**Fourth Semester**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>NURS B28</td>
<td>Medical Surgical Nursing 4</td>
<td>7.0</td>
</tr>
<tr>
<td>NURS B29</td>
<td>Gerontology - Community Nursing</td>
<td>2.0</td>
</tr>
</tbody>
</table>

BC LVN to Associate Degree Nursing Program AS Degree Program

Total Units: 20

Mission

The mission of the Bakersfield College LVN-Associate Degree Nursing Program is to prepare entry-level registered nurses as providers and managers of care across the health/illness continuum and as members within the profession. Graduate nurses will collaborate with members of the health care team, be effective communicators, be politically aware, and demonstrate a commitment to lifelong learning.

Application Procedure

The Allied Health office must receive all application forms and transcripts during the designated filing periods. For detailed information on the application period and procedures, please refer to the Allied Health web site at www2.bakersfieldcollege.edu/alliedhealth/ or come to the Bakersfield College Allied Health Office in MS 178.

Conditional Enrollment

As a condition of enrollment in any Allied Health Program, students are required to submit to and pass a designated drug and alcohol screening, a background screening, and physical examination clearance (at the student’s expense). Please note the following:

- A history of felony conviction(s) or any bar, exclusion or other ineligibility for federal program participation could render a student ineligible for clinical placement, as determined by the clinical agencies.
- If a student cannot obtain background clearance from the clinical agencies, it will not be possible to place the student in the clinical areas, which is a required component of the program. In the event that a student cannot obtain a background clearance, the space will be forfeited. Students who are found to be ineligible for clinical placement by the clinical agency after admission to the program shall be subject to dismissal from the program, as they will be unable to complete mandatory clinical rotations.
- A physical examination completed by a physician of the student’s choice is required after acceptance to the Program to demonstrate that a student meets the technical standards necessary to meet the Program objectives. Appropriate immunizations and/or vaccinations and fit testing are also required and are performed at the student’s expense.

More information can be found on the Allied Health web site at www2.bakersfieldcollege.edu/alliedhealth/ or in the Bakersfield College Allied Health Office, MS 178.

Program Costs

An estimated cost for the program is approximately $1,500.

Program Approval/ Accreditation

The California Board of Registered Nursing approves the Bakersfield College Associate Degree Nursing Program. The Western Association of Schools and Colleges accredits Bakersfield College.

Licensure/Certification Eligibility

Record of any misdemeanor and/or felony is subject to review by the Board of Registered Nursing before a RN license may be granted. Anyone who wishes clarification may contact the Board of Registered Nursing, PO Box 944210, Sacramento, CA 94244. Applicants for RN Licensure must submit a valid Social Security number at the time of application.

Career Opportunities in Registered Nursing

Employment in a variety of healthcare facilities and settings.

Prerequisite Requirements

All prerequisites must be completed with a “C” grade or higher.

- ENGL B1A (Expository Composition) 4 units at Bakersfield College or equivalent course at another accredited college.
- MATH BD (Intermediate Algebra) or higher, 3 units at Bakersfield College or an equivalent course at another
accredited college

- CHEM B11 (Introduction to General Organic and Biochemistry) or CHEM B2a (Introductory General Chemistry) or CHEM B1a (General Chemistry) a minimum of 3-4 units is required at Bakersfield College or an equivalent course at another accredited college. (CSUB requires Chem B11)

- BIOL B16 (General Microbiology) 5 units at Bakersfield College or equivalent course at another accredited college.

- BIOL B32 (Human Anatomy and Physiology I) 4 units at Bakersfield College or equivalent course at another accredited college.

- BIOL B33 (Human Physiology and Anatomy II) 4 units at Bakersfield College or equivalent course at another accredited college.

- Human Anatomy (minimum 4 units) equivalent course at another accredited college

- Human Physiology (minimum 4 units) equivalent course at another accredited college.

- Proof of IV Certification

- One year experience working as an LVN

- Possession of current California Vocational Nurse License.

- American Heart Association BLS - Healthcare Provider card current within one year.

- Overall GPA of 2.5.

- Graduation from high school or an equivalent education.

General Education Courses Units
General education courses are required to graduate from Bakersfield College with an Associate Degree in Nursing. It is suggested that most of these courses be completed prior to beginning the Nursing Program.

- Social Science (3 units) – Any course listed in Area A of the Bakersfield College Catalog.

- Arts, Literature, Philosophy, and Foreign Language (3 units) - Any course listed in Area C of the Bakersfield College Catalog.

- *SOCI B1 or *ANTH B2 (“C” grade or higher)

- *PSYC B1A (“C” grade or higher)

- *COMM B1, COMM B2, or COMM B3 (“C” grade or higher)

- Physical Education (1 unit)

- (A student development course is recommended to be taken during the first semester of courses at Bakersfield College to assure priority registration.)

- NURS B100, STDV B1, STDV B2, STDV B3, or STDV B6

- Health Education (waived for RN students)

* Board of Registered Nursing requirement (must be completed with a grade of “C” or higher).

Note: All graduation requirements of the college must be met to earn an Associate of Science (A.S.) in Nursing and to take the NCLEX RN – Licensure Exam.

LVN-ADN Program Curriculum
The following courses are taken after the student enters the Program.

Third Semester

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS B26</td>
<td>Medical Surgical Nursing</td>
<td>5.5</td>
</tr>
<tr>
<td>NURS B25</td>
<td>Mental Health - Psychiatric Nursing</td>
<td>3.5</td>
</tr>
<tr>
<td>NURS B70</td>
<td>Role Transition: Bridging Nursing Theory to Practice</td>
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</table>

Fourth Semester

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
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<tr>
<td>NURS B28</td>
<td>Medical Surgical Nursing</td>
<td>7</td>
</tr>
<tr>
<td>NURS B29</td>
<td>Gerontology - Community Nursing</td>
<td>2</td>
</tr>
</tbody>
</table>

Program Accreditation
The California Board of Registered Nursing accredits the Bakersfield College Associate Degree Nursing Program. The Western Association of Schools and Colleges accredits Bakersfield College.

Licensure/Certification Eligibility
Conviction of any offenses other than minor traffic violations must be reported to the Board of Registered Nursing at the time of application for licensure. For clarification contact the ADN Program Director or the Board of Registered Nursing, 400 R Street, Suite 4030, Sacramento, California, 95814, (916) 322-3350.

BC LVN to Non-Degree Nurse (30 unit option)

**Total Units: 20**

Students seeking information regarding the 30-unit option preparation for the registered nurse licensing examination may receive further information from the Dean of the Associate Degree Nursing Program. The 30 unit option is specific to California; the majority of other states will not license a 30 unit option RN. As a 30 unit option you are not a graduate of Bakersfield college’s Nursing Program and are not eligible for the program pin.

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.

**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.

**Career Opportunities in Registered Nursing**

Employment in a variety of healthcare facilities and settings.

**Prerequisite Requirements**

All prerequisite courses must be completed prior to submission of program enrollment form. Courses in-progress at the time of application will not be considered.

1. The following courses must be completed with a grade of “C” or higher:
   a. Introductory Physiology (with lab) must meet Board of Registered Nursing requirements in Physiology.
   b. General Microbiology (with lab) must meet Board of Registered Nursing requirements in Microbiology.

2. Additional Prerequisites:
   a. Graduation from high school or an equivalent education.
   b. Possession of a current California Vocational Nurse License.
   c. Employment as a LVN for at least 1 year.
   d. IV Certification.

**30 Unit Option Curriculum**

**Third Semester**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS B25</td>
<td>Mental Health-Psychiatric Nursing</td>
<td>3.5</td>
</tr>
<tr>
<td>NURS B26</td>
<td>Medical Surgical Nursing 3</td>
<td>5.5</td>
</tr>
<tr>
<td>NURS B70</td>
<td>Role Transition:Bridging Theory to Practice</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**Fourth Semester**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS B28</td>
<td>Medical Surgical Nursing 4</td>
<td>7.0</td>
</tr>
<tr>
<td>NURS B29</td>
<td>Gerontology - Community Nursing</td>
<td>2.0</td>
</tr>
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</table>

**Vocational Nursing Program Certificate of Achievement Mission**

The mission of the Bakersfield College Vocational Nursing Program is to prepare entry-level vocational nurses as providers of care across the health/illness continuum and as members within the profession.

**Application Procedure**

The Allied Health office must receive all application forms and transcripts during the designated filing periods. For detailed information on the application period and procedures, please refer to the Allied Health web site at www2.bakersfieldcollege.edu/alliedhealth/ in the Bakersfield College Allied Health Office in MS 178.

**Conditional Enrollment**

As a condition of enrollment in any Allied Health Program, students are required to submit to and pass a designated drug and alcohol screening, a background screening, and physical examination clearance (at the student’s expense). Please note the following:

- A history of felony conviction(s) or any bar, exclusion or other ineligibility for federal program participation could render a student ineligible for clinical placement, as determined by the clinical agencies.

- If a student cannot obtain background clearance from the clinical agencies, it will not be possible to place the student in the clinical areas, which is a required component of the program. In the event that a student cannot obtain a background clearance, the space will be forfeited. Students who are found to be ineligible for clinical placement by the clinical agency after admission to the program shall be subject to dismissal from the program, as they will be unable to complete mandatory clinical rotations.

- A physical examination completed by a physician of the student’s choice is required after acceptance to the Program to demonstrate that a student meets the technical standards necessary to meet the Program objectives. Appropriate immunizations and/or vaccinations and fit testing are also required and are performed at the student’s expense.

More information can be found on the Allied Health web site at www2.bakersfieldcollege.edu/alliedhealth/ or in the Bakersfield College Allied Health Office, MS 178.

**Program Costs**

An estimated cost for the first semester of the program is approximately $2,500.

**Program Approval/Accreditation**

The California Board of Vocational Nursing and Psychiatric Technicians accredits the Bakersfield College Vocational Nursing Program. The Western Association of Schools and Colleges accredits Bakersfield College.

**Licensure/Certification Eligibility**

Conviction of any offenses other than minor traffic violations must be reported to the Board of Vocational Nursing and Psychiatric Technicians at the time of application for licensure. For clarification contact the VN Program Director or the Board of Vocational Nursing and Psychiatric Technicians, 2535 Capitol Oaks Drive, Suite 205, Sacramento, California, 95833, (916) 263-7800 Applicants for VN Licensure must submit a valid Social Security number at the time of application.
Certificate of Achievement
Upon completion of the program of study for Vocational Nursing, the student is eligible for a Certificate of Achievement.

Career Opportunities in Vocational Nursing
Employment as a Licensed Vocational Nurse in a variety of health care settings.

Prerequisite Requirements
All prerequisites must be completed prior to the start of the Program with a “C” grade or higher. Priority is provided to students with all prerequisite courses completed at the time of submitting an enrollment form.

- Proof of graduation from high school or an equivalent education.
- BIOL B18 (Essentials of Human Anatomy and Physiology) at Bakersfield College or an equivalent course at another accredited college.
- PSYC B1a (General Psychology) at Bakersfield College or an equivalent course at another accredited college.
- MATH BA or B200a (Elementary Algebra) at Bakersfield College or an equivalent course at another accredited college.
- Eligibility for ENGL B1a (Expository Composition) as demonstrated by qualifying scores on the college assessment test or completion of ENGL B50 at Bakersfield College or equivalent course from another accredited college.
- Nurse Assistant certification - highly recommended.
- MEDS B60 (Medical Terminology) - highly recommended.

Note: Students desiring to continue their education and become a registered nurse need to refer to the prerequisites required for the Associate Degree Nursing Program.

Vocational Nurse Program Curriculum
The following courses are taken after the student enters the Vocational Nursing Program.

First Semester

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<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>VNRS B1</td>
<td>Nursing Fundamentals</td>
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<tr>
<td>VNURS B1LV</td>
<td>Vocational Nursing Laboratory</td>
<td>6.0</td>
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<tr>
<td>VNRS B1G</td>
<td>Gerontological Nursing</td>
<td>1.0</td>
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<td>VNRS B31AB</td>
<td>Basic Pharmacology</td>
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<td>VNRS B75</td>
<td>Medical/Surgical Nursing I</td>
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Second Semester

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<td>Medical-Surgical Nursing II</td>
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<td>Medical Surgical Nursing II - Clinical Laboratory</td>
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<td>VNRS B86</td>
<td>Medical Surgical Nursing III</td>
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<td>Medical Surgical Nursing III - Clinical Laboratory</td>
<td>3.0</td>
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<td>VNRS B6</td>
<td>Pediatric Nursing</td>
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<td>VNRS B97LV</td>
<td>Pediatrics - Clinical Laboratory</td>
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Nurse Assistant

General Information
The Nurse Assistant (NA) course prepares the student to provide services to those who need health care. The student will learn the role of the caregiver, the health care environment, health care safety, adult needs in health and illness, and basic care giving skills.

Nurse Assistant Program Mission
The mission of the Bakersfield College Nurse Assistant Program is to provide vocational education that will prepare the student to provide basic services to those who need healthcare. The program is committed to improving and advancing the health and welfare of our community by preparing competent, safe, health care professionals.

Enrollment
Enroll in MEDS B69 through the Bakersfield College. Consult the current class schedule for course offerings. For more information go to www2.bakersfieldcollege.edu/allied health/ or come by the Bakersfield College Allied Health Office in MS 178.

Conditional Enrollment
As a condition of enrollment in any Allied Health Program, students are required to submit to and pass a designated drug and alcohol screening, a background screening, and physical examination clearance. Please note the following:

- A history of felony conviction(s) or any bar, exclusion or other inability for federal program participation could render a student ineligible for clinical placement, as determined by the clinical agencies.
- If a student cannot obtain background clearance from the clinical agencies, it will not be possible to place the student in the clinical areas, which is a required component of the program. In the event that a student cannot obtain a background clearance, the space will be forfeited. Students who are found to be ineligible for clinical placement by the clinical agency after admission to the program shall be subject to dismissal from the program, as they will be unable to complete mandatory clinical rotations.
- A physical examination completed by a physician of the student’s choice is required after acceptance to the Program to demonstrate that a student meets the technical standards.
necessary to meet the Program objectives. Appropriate immunizations and/or vaccinations and fit testing are also required and are performed at the student’s expense.

More information can be found on the Allied Health web site at www2.bakersfieldcollege.edu/alliedhealth/ or in the Bakersfield College Allied Health Office, MS 178.

Program Costs
An estimated cost for the program (fees, textbooks, uniforms, and examination) is approximately $1,000. Financial aid may be available.

Program Approval Accreditation
The California Department of Public Health approves the Bakersfield College Nurse Assistant Program. The Western Association of Schools and Colleges accredits Bakersfield College.

Licensure/Certification Eligibility
Students with a misdemeanor and/or felony arrest conviction, either current or prior, may not receive certification or licensure from the State or County. Also, a Social Security number and fingerprinting are required by State certification/licensure agencies. Anyone who wishes clarification may contact the Allied Health Office at 661-395-4281.

Nurse Assistant Job Skills Certificate
Upon successful completion of the Nurse Assistant course, the student is eligible to take the competency exam for a Certified Nurse Assistant administered by the American Red Cross. This provides proof to the California Department of Public Health that the student has met the requirements for licensure. Students must complete the required courses with at least a “C” grade. Total Units: 6

Career Opportunities in Nurse Assistant
Employment as a Certified Nurse Assistant in a variety of health care settings.

Nurse Assistant Curriculum:
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDS B69</td>
<td>Nurse Assistant</td>
<td>6.0</td>
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</table>

PHILOSOPHY

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).

Philosophy Associate in Arts Degree
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

Total Units: 18

Required Courses:
<table>
<thead>
<tr>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PHIL B6a</td>
<td>Introduction to Philosophy</td>
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<tr>
<td>PHIL B7 or</td>
<td>Introduction to Logic</td>
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</tr>
<tr>
<td>PHIL B9</td>
<td>Critical Thinking and Advanced</td>
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<td></td>
<td>Composition</td>
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</tr>
<tr>
<td>PHIL B10</td>
<td>Introduction to Ethics</td>
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</table>

Electives - at least 9 units

<table>
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<tr>
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<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>PHIL B12</td>
<td>Ethics of Living and Dying</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL B18</td>
<td>History of Ancient Philosophy</td>
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</tr>
<tr>
<td>PHIL B32</td>
<td>World Religions: East</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL B33</td>
<td>World Religions: West</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL B37</td>
<td>Introduction to World Religions</td>
<td>3.0</td>
</tr>
</tbody>
</table>

PHYSICAL EDUCATION

Physical Education Associate in Arts
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

A major in Physical Education will encourage students to perceive learning as the merging of cognitive, affective, social, and psychomotor domains. A major in Physical Education allows students to transfer to a four-year university/college and is a starting point for a variety of Graduate and Doctoral Degrees. A degree in Physical Education can lead to employment in a variety of teaching and coaching avenues along with athletics and recreation based jobs, including athletic training, physical therapy, adaptives, etc.

The major requirements for an Associate Degree in Physical Education may be satisfied by completing 23 units as outlined below.

Total Units: 23

Required Courses:
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLED B1</td>
<td>Principles of Health Education</td>
<td>3.0</td>
</tr>
<tr>
<td>PHED B39a</td>
<td>Prevention and Care of Athletic Injuries</td>
<td>3.0</td>
</tr>
<tr>
<td>PHED B40</td>
<td>Introduction to Physical Education</td>
<td>3.0</td>
</tr>
<tr>
<td>PHED B31</td>
<td>Standard First Aid</td>
<td>1.0</td>
</tr>
<tr>
<td>BIOL B32</td>
<td>Human Anatomy and Physiology I</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL B33</td>
<td>Human Anatomy and Physiology II</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Electives: at least 5 units from one of the activities listed below:

Team Activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHED B5wsb Advanced Softball (Women)</td>
<td>1.00</td>
</tr>
<tr>
<td>PHED B5vb Volleyball (Women)</td>
<td>1.00</td>
</tr>
<tr>
<td>PHED B6bb Basketball</td>
<td>1.00</td>
</tr>
<tr>
<td>PHED B6g-golf</td>
<td>1.00</td>
</tr>
</tbody>
</table>
PHED B6sc Soccer 1.00
PHED B6t Tennis 1.00
PHED B6v Volleyball 1.00
PHED B7b Advanced Baseball 1.00
PHED B7fb Advanced Football 1.00
PHED B7w Advanced Wrestling 1.00
PHED B9s Advanced Swimming 1.00
PHED B9t Advanced Tennis 1.00
PHED B9tr Advanced Track 1.00
PHED B10 Intercollegiate Football 2.00
PHED B11 Intercollegiate Basketball 2.00
PHED B12 Intercollegiate Track and Field 2.00
PHED B13 Intercollegiate Tennis 2.00
PHED B14 Intercollegiate Baseball 2.00
PHED B16 Intercollegiate Golf 2.00
PHED B17 Intercollegiate Cross-Country 2.00
PHED B20 Intercollegiate Wrestling 2.00
PHED B22 Women’s Intercollegiate Tennis 2.00
PHED B23 Women’s Intercollegiate Soccer 2.00
PHED B24 Intercollegiate Golf for Women 2.00
PHED B25 Women’s Intercollegiate Volleyball 2.00
PHED B26 Women’s Intercollegiate Track and Field 2.00
PHED B27 Women’s Intercollegiate Cross-Country 2.00
PHED B28 Women’s Intercollegiate Basketball 2.00
PHED B29 Women’s Intercollegiate Softball 2.00

Individual Activities
PHED B3adp Adaptive Physical Education 1.00
PHED B6a Archery 1.00
PHED B6bLB Beginning Ballet (Same as DANC B6bLB) 1.00
PHED B6da Dance Aerobics 1.00
PHED B6fcx Fitness Center 1.00
PHED B6jd Jazz Dance (Same as DANC B6jd) 1.00
PHED B6kx CardioKickboxing Fitness 1.00
PHED B6md Modern Dance (Same as DANC B6md) 1.00
PHED B6pl Pilates 1.00
PHED B6py Pilates/Yoga Mat Flow 1.00
PHED B6wt Weight Training 1.00
PHED B6y Yoga 1.00

Aquatics
PHED B2dwr Deep Water Running 1.00
PHED B2sh Beginning Swimming 1.00
PHED B2sf Swim and Stay Fit 1.00
PHED B2wa Water Aerobics 1.00
PHED B2wp Water Polo 1.00

PHYSICS

Physics Associate in Science Degree
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better. The Associate in Science Degree in Physics is designed to prepare students to begin upper division course work in pursuit of a Bachelor’s Degree (or ultimately a graduate degree) in physics upon transfer to a four-year college or university. Earning this degree should allow the student to become acquainted with the basic knowledge of physics contained in a calculus-based introductory physics sequence and the mathematics that supports that level of competency. The student will demonstrate proficiency in communication, critical thinking, quantitative problem solving, and laboratory science skills. This degree represents a step in a path preparing students for careers in any of the many branches of physics, physics education, and other technical fields, such as some engineering disciplines in which physics is an integral part.

Total Units: 34

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS B4a</td>
<td>Mechanics &amp; Wave Motion</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B4b</td>
<td>Heat, Electricity, &amp; Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B4c</td>
<td>Optics &amp; Modern Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM B1a</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B1b</td>
<td>General Chemistry &amp; Chemical Analysis</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH B6a</td>
<td>Analytic Geometry &amp; Calculus</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6b</td>
<td>Analytic Geometry &amp; Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6c</td>
<td>Calculus III</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6d</td>
<td>Ordinary Differential Equations</td>
<td>3.0</td>
</tr>
</tbody>
</table>

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) 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.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS B4a</td>
<td>Mechanics &amp; Wave Motion</td>
<td>4.0</td>
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<tr>
<td>PHYS B4b</td>
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<td>Optics &amp; Modern Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM B1a</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B1b</td>
<td>General Chemistry &amp; Chemical Analysis</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH B6a</td>
<td>Analytic Geometry &amp; Calculus</td>
<td>4.0</td>
</tr>
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<td>MATH B6b</td>
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<td>4.0</td>
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<td>MATH B6c</td>
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<td>4.0</td>
</tr>
<tr>
<td>MATH B6d</td>
<td>Ordinary Differential Equations</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Recommended Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL B3a</td>
<td>General Biology I</td>
<td>5.0</td>
</tr>
<tr>
<td>BIOL B11</td>
<td>Concepts of Biology</td>
<td>4.0</td>
</tr>
</tbody>
</table>

POLITICAL SCIENCE

Political Science Associate in Arts Degree
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

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.

Total Units: 18

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title (Description)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS B1</td>
<td>American Government: National, State and local</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS B2 or</td>
<td>Comparative Government</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS B3</td>
<td>International Politics</td>
<td></td>
</tr>
<tr>
<td>POLS B12 or</td>
<td>Contemporary Issues in California State and Local Government</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS B16</td>
<td>Vital Political Problems</td>
<td></td>
</tr>
<tr>
<td>HIST B4ab or</td>
<td>European Civilization</td>
<td>6.0</td>
</tr>
<tr>
<td>HIST B17ab or</td>
<td>History of the U.S.</td>
<td></td>
</tr>
<tr>
<td>HIST B20ab or</td>
<td>African American History of the US</td>
<td></td>
</tr>
<tr>
<td>HIST B30ab</td>
<td>Chicano History</td>
<td></td>
</tr>
<tr>
<td>ECON B2 or</td>
<td>Principles of Economics-Macro</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B5 or</td>
<td>Elementary Statistics for the Behavioral and Social Sciences (5.0)</td>
<td></td>
</tr>
<tr>
<td>MATH B22</td>
<td>Elementary Probability and Statistics (5.0)</td>
<td></td>
</tr>
</tbody>
</table>

Political Science, Emphasis in Domestic Policy
Associate in Arts Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

Total Units: 18

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title (Description)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS B1</td>
<td>American Government: National, State and local</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS B12</td>
<td>Contemporary Issues in California State and Local Government</td>
<td>3.0</td>
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<tr>
<td>POLS B16</td>
<td>Vital Political Problems</td>
<td></td>
</tr>
<tr>
<td>HIST B4ab</td>
<td>European Civilization</td>
<td>6.0</td>
</tr>
<tr>
<td>HIST B17ab</td>
<td>History of the U.S.</td>
<td></td>
</tr>
<tr>
<td>ECON B2 or</td>
<td>Principles of Economics-Macro</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B5 or</td>
<td>Elementary Statistics for the Behavioral and Social Sciences (5.0)</td>
<td></td>
</tr>
<tr>
<td>MATH B22</td>
<td>Elementary Probability and Statistics (5.0)</td>
<td></td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title (Description)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL B2</td>
<td>Advanced Composition &amp; Critical Thinking</td>
<td>5.0</td>
</tr>
<tr>
<td>HIST B18</td>
<td>History of California</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B1a</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOCI B1</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Political Science, Emphasis in International Relations
Associate in Arts Degree

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

Total Units: 18

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title (Description)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS B1</td>
<td>American Government: National, State and local</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS B2</td>
<td>Comparative Government</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS B3</td>
<td>International Politics</td>
<td></td>
</tr>
<tr>
<td>HIST B4ab</td>
<td>European Civilization</td>
<td>6.0</td>
</tr>
<tr>
<td>ECON B2 or</td>
<td>Principles of Economics-Macro</td>
<td>3.0</td>
</tr>
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<td></td>
</tr>
<tr>
<td>MATH B22</td>
<td>Elementary Probability and Statistics (5.0)</td>
<td></td>
</tr>
</tbody>
</table>

PRE-VETERINARY MEDICINE

See Agriculture

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 Bakersfield College 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 BA at Bakersfield College.

Chemistry - Introductory. One year of high school chemistry or equivalent.

Cultural Anthropology or Sociology: ANTH B2, SOCI B1 at Bakersfield College, or another acceptable course.

English Composition - Freshman level: ENGL B50 (formerly ENGL B1), ENGL 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. See Graduation and General Education Section of this catalog.

Computer Literacy - Two semester units. Must include experience at a terminal (COMS B2) 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: COMM B1 or COMM 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.

PSYCHOLOGY

Associate in Arts in Psychology for Transfer
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

The Associate in Arts in Psychology for Transfer is intended for those transfer-directed students who plan to complete an AA in Psychology because it guarantees admission to the CSU system (but not to a particular campus or major). In order to earn the Associate in Arts in Psychology for Transfer, students must complete a minimum of 60 required semester units of CSU-transferable coursework which includes the CSU General Education or IGETC requirements with a minimum GPA of 2.0. Students transferring to a CSU campus that does accept the Associate in Arts in Psychology for Transfer will be required to complete no more than 60 units after transfer to earn a bachelor’s degree (unless the major is a designated “high-unit” major). This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. This degree eliminates the additional Bakersfield College graduation requirements.

The major in psychology provides a study of the behavior of individuals and groups. The four-year degree in this major contributes to the foundational knowledge for positions in research and teaching, counseling, and working in clinical settings. The successful student will be able to:

- Demonstrate an understanding of the perspectives, theories, methods and core concepts of the behavioral sciences.
- Explain the major problems and issues in the disciplines in their contemporary, historical and geographical contexts.
- Demonstrate an understanding of and an ability to describe the contributions and perspectives of women, ethnic and other minorities, and Western and non-Western peoples.

Core Courses Required: 15 units

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC B1a*</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B1b*</td>
<td>Biological Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B5*</td>
<td>Elementary Statistics for the Behavioral</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>and Life Sciences</td>
<td></td>
</tr>
<tr>
<td>PSYC B6*</td>
<td>Research Methods for the Behavioral and</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>Social Sciences</td>
<td></td>
</tr>
</tbody>
</table>

Select two courses from the following: 6 units

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC B2</td>
<td>Interpersonal and Group Process Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B20*</td>
<td>Social Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B30*</td>
<td>Human Sexuality</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B33*</td>
<td>Psychology of Adjustment</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B40</td>
<td>Lifespan Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

CSU Breadth or IGETC General Education Pattern: 38 units

(*Courses with an asterisk can be double counted for General Education)
Total Units: 60 - completion of a General Education pattern and 21 units within the major.

RADIOLOGIC TECHNOLOGY

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. Students should anticipate making a full time commitment to the program during the school year. Summer sessions are required and semester/terms may be scheduled beyond the regular college session dates. The Program is primarily scheduled during the day; however an evening clinical rotation will be completed during the second year of the program. Clinical education sites include hospitals and imaging centers located in Bakersfield, California and Delano, California. Students may assigned to any clinical education center in any geographical location.

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 (ARRT); and for certification from the State of California, Department of Public Health, Radiologic Health Branch, 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 courses, have met the State mandated curriculum and clinical hours, met all clinical education competencies and earned the Associate in Science degree to be recommended for these examinations/certifications. For program information, brochure and enrollment application form, consult the following website at www2.bakersfieldcollege.edu/alliedhealth/

Radiologic Technology Program Mission, Goals and Outcomes
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 goals and outcomes are:
1) Students will be clinically competent. 2) Students will critically think and problem solve. 3) Students will demonstrate effective communication skills. 4) Students will demonstrate professional growth and development. 5) The Program will graduate entry-level radiographers.

Radiologic Technology Program Prerequisite Requirements
All prerequisite coursework must be completed prior to applying for the Radiologic Technology Program. When there are more applicants than space available, priority is provided to applicants that reside within the Kern Community College District. Non-resident applications will not be considered.

Students are strongly encouraged to complete prerequisite courses prior to enrolling in general education courses. This will improve a student’s opportunity to apply for program enrollment. The following prerequisite courses must be completed with a “C” grade or higher:
1. BIOL B18 (Essentials of Human Anatomy and Physiology) OR
   BIOL B32 (Human Anatomy and Physiology I) and
   BIOL B33 (Human Anatomy and Physiology II) OR
   equivalent course(s) at another accredited college.
Note: BIOL B14 (Human Anatomy) and BIOL B15 (Human Physiology) were previously taught at Bakersfield College and they meet this requirement.
2. MATH BD (Intermediate Algebra) at Bakersfield College OR
   equivalent course at another accredited college. A higher level college math course will be accepted in lieu of this algebra requirement.
3. MEDS B60 (Medical Terminology - 3 units) at Bakersfield College or equivalent course at another accredited college.
4. ENGL B1a (Expository Composition - 4 units); or an equivalent course from another accredited college.
   This prerequisite must be met by all new and Wait List applications received in February 2013.
5. Graduation from high school or an equivalent education (GED).

Enrollment Procedures and Filing Period
Enrollment forms and all required documents must be received by the Radiologic Technology Program Office during the application month of February. Late applications will not be accepted. The next application period for new applicants will be February 2013. Due to the large number of students on the current Program Wait List, new applications will not be accepted in 2012. Students currently on the Wait List must refer to #7 under Enrollment Application Procedures for more information.

Enrollment Application Procedures
1. Complete required prerequisite courses (see above).
2. Obtain enrollment application forms from the Allied Health Department located in Room 178 of the Math-Science Building on the main campus; or by telephone at (661) 395-4284; or on the website at www2.bakersfieldcollege.edu/alliedhealth/.
3. Arrange for an official copy of your high school transcript to be mailed directly to the: Radiologic Technology Program, Bakersfield College, 1801 Panorama Drive, Bakersfield, California 93305. A copy of High School Equivalency (GED) is required if your high school transcript does not identify graduation. Note: You may also hand deliver this transcript providing the transcript is “official” and sealed.
4. If you are a Bakersfield College student with no other college courses other than Bakersfield College courses: Provide the Program with an unofficial Bakersfield transcript.
from the college web site or an unofficial transcript from
the Admissions and Records Office. If you plan to qualify
for the English prerequisite through an assessment score,
you must also provide this to the Program.

5. If you have taken courses from any other college other than
Bakersfield College:
   a. Apply for admission to Bakersfield College either in person
      or online at www.bakersfieldcollege.edu, click on Admis-
      sions and Records and follow the directions under “Enroll-
      ing.”
   b. Submit an official copy of your transcripts from your
      previous college to the Office of Admissions & Records
      and request an evaluation of your transcripts. This pro-
      cess requires the form “Request for Evaluation”. You may
      obtain this form in the Office of Admissions & Records
      or on-line under Admissions & Records “Other Forms.”
      Note: This process can take up to 12-16 weeks. Once your
      transcripts have been evaluated and posted to your Bakers-
      field College transcript, the student must either print a copy
      of the Bakersfield College transcript from the website or
      request one from the Office of Admissions and Records.
      This evaluation must be completed and then submitted to
      the Program prior to the end of the Program enrollment fil-
      ing period during the month of February. It is the respon-
      sibility of the student to supply this information to the
      Program during the month of February prior to the end
      of the enrollment filing period.

6. Late application materials will not be considered for the
current application period. Applicants are responsible for
ensuring that their application is complete. The program is
NOT responsible for late materials or incomplete applica-
tions. The application must be thoroughly completed and
signed to be considered for eligibility.

7. Students on the Wait List must reapply annually during the
enrollment month of February. This is required every year
to keep the applicant’s file current. If the student does NOT
reapply, the student will be removed from the Wait List.
Applications will be accepted in February 2012 for current
Wait List students only.

8. If the Radiologic Technology Program has more applicants
for enrollment than space available and the current Wait
List will fill the next program class of students, priority
is provided to residents of the Kern Community College
District.

General Education Requirements

General education courses are required to graduate from the
Bakersfield College Associate in Science Degree Radiologic
Technology Program. It is suggested that these courses
be completed prior to program enrollment. Refer to the
Bakersfield College General Education and Graduation
Requirements in this catalog for more specific information
and requirements for the college (the list below does NOT
identify all requirements). All students are encouraged to
regularly check the college requirements for graduation to
ensure that AS degree requirements will be met at the end of
the radiography program.

   1. Student Development: It is recommended that students
      complete this component as they begin college course-
      work.
   2. Computer Studies (3 units) - COMS B2 or COMS B5 or
equivalent is necessary to meet radiologic technology
   program completion.
   3. Behavioral Science - Psychology B1a recommended
   4. Arts, Literature, Philosophy and Foreign Language-Hu-
      manities - Philosophy B12 recommended.
   5. Health Education - Students that successfully complete
      the Radiologic Technology Program are waived from the
      Health Education requirement for graduation.
   6. An individual who has previously received an associate
degree or higher must meet and earn the Associate in Sci-
ence Degree requirements for the Radiologic Technology
   Program to meet eligibility requirements for certification
   and licensure.

Health Requirements and Screenings

1. A physical examination will be required after the students
receive notification of enrollment into the program to
   demonstrate that a student meets the technical standards
   necessary to meet the objectives of the program. A copy of
   the Essential Technical Standards required for Radiologic
   Technologists may be obtained in the Allied Health Divi-
   sion Office located in the Math-Science building, room
   178 or on the program website at www2.bakersfieldcol-
   lege.edu/alliedhealth.

2. As a condition of enrollment to the Radiologic Technology
   Program, all students are required to submit to and pass a
designated drug and alcohol screen.

3. As a condition of enrollment in any Allied Health Program
   with a clinical component, students are required to submit
to and pass a designated background check. Every student
offered space in the program will be required to submit
   to a background screening as part of his or her clinical
requirements for admission. Please note the following:
   • A history of felony conviction(s) or any bar, exclusion or
     other ineligibility for federal program participation could
     render a student ineligible for clinical placement, as deter-
     mined by the clinical agencies.
   • If a student cannot obtain background clearance from
     the clinical agencies, it will not be possible to place the stu-
     dent in the clinical areas, which is a required component
     of the program.
   • In the event that a student cannot obtain a background
     clearance, the space will be forfeited.
   • Students who are found to be ineligible for clinical place-
     ment by the clinical agency after admission to the ra-
     diography program shall be subject to dismissal
     from the program, as they will be unable to complete
     mandatory clinical rotations.

4. Immunizations/health tests are needed for acceptance in a
   clinical education center and to protect the health and wel-
   fare of the student and community. Immunizations may
   include, but not be limited to, rubella, varicella, Hepatitis
   B, and Tuberculosis screening and the seasonal flu vaccine
   is also required.
5. The medical exams, drug/alcohol screens, background screen, immunizations and tests are performed at the expense of the student.
6. The student must possess a current Basic Life Support/ CPR (cardiopulmonary resuscitation) card by the American Health Association (Healthcare Provider card). This card must be provided at the start of the program and be kept valid during the entire 24-month program.

Program Supply Information
Students will be required to purchase uniforms, textbooks and selected equipment, provide transportation to off campus clinical education centers in Bakersfield, California and Delano, California and pay current college fees. Estimated costs for books, uniforms, fees and required equipment for the first year of the program are approximately $1,200 to 1,400. Subsequent semesters usually require enrollment fees, supplies, books and course syllabi (approximately $1,200). Expenses for the last semester of enrollment also include the program pin and application fees for national and state licensure/registration examinations (approximately $450).

Licensure/Certification Eligibility
The American Registry of Radiologic Technologists (ARRT) requires review of any conviction, misdemeanor or felony, or a sanction by the Program regarding an academic honor code, or review of suspension or dismissal by a radiography program and review of licensure suspension, denial or other disciplinary action by a regulatory authority or certification board other than the ARRT. This review may be conducted prior to or during the program. For more information contact the ARRT at: 1225 Northland Drive, Mendota Heights, MN 55120, (651) 687-0048w, www.arrt.org.
The State Department of Public Health, Radiologic Health Branch and the American Registry of Radiologic Technology requires possession of either a Social Security number or Tax payer ID number to apply for licensure and/or registration.

Accreditation
Bakersfield College is accredited by the Western Association of Schools and Colleges. The Radiologic Technology Program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), 20 N. Wacker Drive, Suite 2850, Chicago, Illinois 60606-3182, (312) 704-5300 or www.jrcert.org. The program is also approved by the State of California, Department of Public Health, Radiologic Health Branch, P.O. Box 997414, MS-7610, Sacramento, CA, 95899-7414, (916) 327-5106 or www.cdph.ca.gov/rhb

Career Opportunities in Radiologic Technology
This degree is a Career and Technical Education (CTE) program which prepares students for both State licensure and national certification in radiography which is necessary for employment in x-ray technology.

Associate Degree Radiologic Technology Program
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

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

First Summer
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADT B1a</td>
<td>Intro to Radiologic Technology</td>
<td>2.0</td>
</tr>
<tr>
<td>RADT B1b</td>
<td>Patient Care</td>
<td>2.0</td>
</tr>
<tr>
<td>RADT B4a</td>
<td>Intro to Clinical Education</td>
<td>1.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>5.5</td>
</tr>
</tbody>
</table>

First Fall Semester
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADT B2a</td>
<td>Radiograph Anatomy and Positioning 1</td>
<td>3.0</td>
</tr>
<tr>
<td>RADT B3a</td>
<td>Radiographic Principles 1</td>
<td>3.0</td>
</tr>
<tr>
<td>RADT B4b</td>
<td>Clinical Education 1</td>
<td>4.0</td>
</tr>
<tr>
<td>RADT B12</td>
<td>Radiobiology/Radiation Protect</td>
<td>2.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>12.0</td>
</tr>
</tbody>
</table>

First Spring Semester
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADT B2B</td>
<td>Radiograph Anatomy and Positioning 2</td>
<td>3.0</td>
</tr>
<tr>
<td>RADT B3B</td>
<td>Radiographic Principles 2</td>
<td>3.0</td>
</tr>
<tr>
<td>RADT B6</td>
<td>Clinical Education 2</td>
<td>4.0</td>
</tr>
<tr>
<td>General Education (if needed)</td>
<td></td>
<td>3.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>13.0</td>
</tr>
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</table>

Second Summer
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADT B7</td>
<td>Clinical Education 3</td>
<td>6.5</td>
</tr>
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</table>

Second Fall Semester
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADT B2C</td>
<td>Radiograph Anatomy/Position 3</td>
<td>3.0</td>
</tr>
<tr>
<td>RADT B5</td>
<td>Radiation Physics</td>
<td>3.0</td>
</tr>
<tr>
<td>RADT B10</td>
<td>Clinical Education 4</td>
<td>6.5</td>
</tr>
<tr>
<td>General Education (if needed)</td>
<td></td>
<td>3.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>15.5</td>
</tr>
</tbody>
</table>

Second Spring Semester
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADT B9A</td>
<td>Sectional Anatomy/Medical Imag</td>
<td>3.0</td>
</tr>
<tr>
<td>RADT B11</td>
<td>Radiographic Pathology</td>
<td>2.0</td>
</tr>
<tr>
<td>RADT B30</td>
<td>Principles of Venipuncture</td>
<td>1.0</td>
</tr>
<tr>
<td>RADT B13</td>
<td>Clinical Education 5</td>
<td>8.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>14.0</td>
</tr>
</tbody>
</table>

Principles of Fluoroscopy Job Skills Certificate
This certificate provides fluoroscopy skills for students completing the Associate in Science Radiologic Technology program. The certificate is required as proof of completion to meet the regulations specified by the California Code of Regulations (CCR), Title 17:Public Health, Article 8: Additional School Requirements and Record Keeping, Section. 30437.
Upon successful completion of the following courses with at least a “C” grade in each course, the student will be awarded a Principles of Fluoroscopy Job Skills Certificate.

**Required Courses**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADT B50</td>
<td>Principles of Fluoroscopy</td>
<td>2.0</td>
</tr>
<tr>
<td>OR</td>
<td>Completion of Radiologic Technology Program courses (some hours are contained within each of the following courses. These courses are state approved by the California Department of Public Health)</td>
<td></td>
</tr>
<tr>
<td>RADT B2a</td>
<td>Radiographic Anatomy &amp; Positioning 1</td>
<td>3.0</td>
</tr>
<tr>
<td>RADT B2b</td>
<td>Radiographic Anatomy &amp; Positioning 2</td>
<td>3.0</td>
</tr>
<tr>
<td>RADT B3a</td>
<td>Radiographic Principles 1</td>
<td>3.0</td>
</tr>
<tr>
<td>RADT B3b</td>
<td>Radiographic Principles 2</td>
<td>3.0</td>
</tr>
<tr>
<td>RADT B4a</td>
<td>Introduction to Clinical Education</td>
<td>1.5</td>
</tr>
<tr>
<td>RADT B5</td>
<td>Radiation Physics</td>
<td>3.0</td>
</tr>
<tr>
<td>RADT B9a</td>
<td>Sectional Anatomy for Medical Imaging</td>
<td>3.0</td>
</tr>
<tr>
<td>RADT B9c</td>
<td>Principles of Angiography</td>
<td>1.0</td>
</tr>
<tr>
<td>RADT B12</td>
<td>Radiobiology and Radiation Protection</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**Principles of Venipuncture Job Skills Certificate**

The purpose of this certificate is for successful completion of the Principles of Venipuncture course taught at Bakersfield College. The venipuncture regulations and requirements are part of the Health and Safety Code of California, Section 106985. The certificate is necessary for job readiness and to indicate competency for the performance of venipunctures at the job site. The State of California code requires a certificate to indicate proficiency.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADT B30</td>
<td>Principles of Venipuncture</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Note: The clinical components of all radiologic technology courses are graded on a Pass/No Pass basis only.

Radiologic Technology students are exempt from the maximum of three Pass/No Pass units which may be taken in a semester and from the maximum of 12 Pass/No Pass units which may be applied toward the AS degree at Bakersfield College.

**REAL ESTATE**

*See Business Administration*

**REGISTERED NURSING**

*See Nursing*

**SO CI O LO GY**

**Associate in Arts in Sociology for Transfer**

Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

The Associate in Arts in Sociology for Transfer is intended for those transfer-directed students who plan to complete an AA in Sociology because it guarantees admission to the CSU system (but not to a particular campus or major). In order to earn the Associate in Arts in Sociology for Transfer, students must complete a minimum of 60 required semester units of CSU-transferable coursework which includes the CSU General Education or IGETC requirements with a minimum GPA of 2.0. Students transferring to a CSU campus that does accept the Associate in Arts in Sociology for Transfer will be required to complete no more than 60 units after transfer to earn a bachelor’s degree (unless the major is a designated “high-unit” major). This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. No additional graduation requirements are required to complete this degree.

Sociology is the study of groups, institutions, social relationships, and social problems in contemporary society. The sociology major prepares the student for careers in law, social work, human services, urban development, law enforcement agencies, public service, counseling, mental health, teaching, and community service. Students will be prepared for a baccalaureate degree in Sociology or a similar degree.

Successful student in the degree program will be able to:

- Demonstrate an understanding of the perspectives, theories, methods and core concepts of the social sciences.
- Explain the major problems and issues in the disciplines in their contemporary, historical and geographical contexts.
- Demonstrate an understanding of and an ability to describe the contributions and perspectives of women, ethnic and other minorities, and Western and non-Western peoples.

**Core Course Required: 3 units**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCI B1*</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Select two of the following courses: 7-8 units**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCI B2*</td>
<td>Problems of Modern Society</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B5*</td>
<td>Elementary Statistics for Behavioral and Social Science</td>
<td>5.0</td>
</tr>
<tr>
<td>PSYC B6*</td>
<td>Research Methods for the Behavioral and Social Sciences</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Select three of the following courses or any course not already used above: 9 units**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCI B28*</td>
<td>Women in the World</td>
<td>3.0</td>
</tr>
<tr>
<td>SOCI B45*</td>
<td>Minority Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B1*</td>
<td>Introduction to Criminal Justice</td>
<td>3.0</td>
</tr>
<tr>
<td>SOCI B20*</td>
<td>Social Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOCI B36*</td>
<td>Sociology of the Chicano</td>
<td>3.0</td>
</tr>
</tbody>
</table>
CSU Breadth or IGETC GE Pattern: 36-39 units
Courses marked with an asterisk may be double counted for the Sociology degree and General Education depending upon the General Education pattern.

The courses below should be considered to make up the additional units making a total of 60 units:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCI B21</td>
<td>Special Projects/Sociology</td>
<td>1-4</td>
</tr>
<tr>
<td>Any transferable anthropology or psychology course</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>

No additional graduation requirements are required to complete this degree.

Total Units: 60 - completion of a GE pattern and 19-21 units within the major.

SPANISH

Spanish Associate in Arts Degree
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

The major of Spanish provides a linguistic and grammatical study of the language and an in-depth look into the culture of Spanish-speaking peoples. The objective of the program is to prepare students for transfer to a four-year university. Employment opportunities are numerous, and include both academic and non-academic positions, including working for corporations, business entities, and not-for-profits. Numerous career pathways are open to students demonstrating a proficiency in spoken and written Spanish including, but not limited to, teaching, social service, and retail.

Total Units: 18

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN B1ab</td>
<td>Elementary Spanish</td>
<td>5.0</td>
</tr>
<tr>
<td>SPAN B2ab</td>
<td>Elementary Spanish</td>
<td>5.0</td>
</tr>
<tr>
<td>SPAN B3</td>
<td>Intermediate Spanish</td>
<td>4.0</td>
</tr>
<tr>
<td>SPAN B4 or</td>
<td>Intermediate Spanish</td>
<td>4.0</td>
</tr>
<tr>
<td>SPAN B10</td>
<td>Spanish for Heritage Speakers</td>
<td></td>
</tr>
</tbody>
</table>

SPEECH

See Communication

THEATRE ARTS

Theatre Arts Associate in Arts Degree
Effective Fall 2009 all courses used for meeting the requirements for degrees must be completed with a grade of “C” or better.

Students must comply with the requirements as shown in the catalog under graduation requirements. Students should seek the advice of a Theatre Instructor, Counselor or Advisor for assistance in planning for an Associate Degree.

Total Units: 19

VOCATIONAL NURSING

See Nursing

WELDING

Blueprint Reading and Layout for Welders Job Skills Certificate
This certificate covers the principles of blueprint reading as it applies to welders. Emphasis is placed on the ability to visualize and interpret working drawings. Welding symbols and basic shop math are included. Layout techniques including mathematical and pipe fitting technology are covered.

Upon completion of the following courses with at least a “C” grade in each course, the student will be awarded a Blueprint Reading and Layout for Welders Job Skills Certificate.

Total Units: 6

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD B54a</td>
<td>Blueprint Reading for Welders and</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>Machinists</td>
<td></td>
</tr>
<tr>
<td>WELD B54b</td>
<td>Template Development and Layout for</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>the Welder</td>
<td></td>
</tr>
</tbody>
</table>

Gas Metal Arc/Gas Tungsten Arc Welding/Flux Core Arc Welding Job Skills Certificate
This certificate emphasizes welding processes of gas metal arc welding (GMAW), gas tungsten arc welding (GTAW) and flux core arc welding (FCAW). Theory and application as well as safety of these applications while welding on mild steel, aluminum and stainless steel are emphasized.

Upon completion of the following courses with at least a “C” grade in each course, the student will be awarded a Gas Metal Arc/Gas Tungsten/Flux Core Arc Welding Job Skills Certificate.

Total Units: 6

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD B54a</td>
<td>Blueprint Reading for Welders and</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>Machinists</td>
<td></td>
</tr>
<tr>
<td>WELD B54b</td>
<td>Template Development and Layout for</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>the Welder</td>
<td></td>
</tr>
</tbody>
</table>

Note: Theatre majors should enroll for at least one unit of THEA B27 or THEA B28 per semester.
Certificate.
Total Units:  8.0

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD B1a</td>
<td>Introduction to Oxygen Acetylene Welding and Cutting</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B1b</td>
<td>Introduction to the Welding Processes</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B53ab</td>
<td>Shielded Metal Arc Welding</td>
<td>4.0</td>
</tr>
<tr>
<td>WELD B74a</td>
<td>Introduction to GMAW &amp; FCAW</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Shielded Metal Arc Welding Job Skills Certificate
This certificate emphasizes welding processes from oxy-acetylene cutting and brazing through shielded metal arc welding using many different welding electrodes and all positions. Blueprint reading and pattern layouts for welding are highlighted.

Upon completion of the following courses with at least a “C” grade in each course, the student will be awarded a Shielded Metal Arc Welding Job Skills Certificate.
Total Units: 12

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>WELD B1a &amp;</td>
<td>Introduction to Oxygen Acetylene Welding and Cutting</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B1b &amp;</td>
<td>Introduction to the Welding Processes</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B53ab &amp;</td>
<td>Shielded Metal Arc Welding</td>
<td>4.0</td>
</tr>
<tr>
<td>WELD B54a &amp;</td>
<td>Blueprint Reading for Welders and Machinists</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD B54b</td>
<td>Template Development and Layout for the Welder</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Welding Certificate of Achievement
Total Units: 30.0

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD B1a</td>
<td>Introduction to Oxygen Acetylene Welding and Cutting</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B1b</td>
<td>Introduction to the Welding Processes</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B53ab</td>
<td>Shielded Metal Arc Welding</td>
<td>4.0</td>
</tr>
<tr>
<td>WELD B55ab</td>
<td>Structural Plate Certification</td>
<td>4.0</td>
</tr>
<tr>
<td>WELD B55cd</td>
<td>ASME Pipe Certification</td>
<td>4.0</td>
</tr>
<tr>
<td>WELD B74a</td>
<td>Introduction to GMAW &amp; FCAW</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B74b</td>
<td>Introduction to GTAW</td>
<td>2.0</td>
</tr>
<tr>
<td>MFGT B1ab</td>
<td>Machine Tool Processes</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD B54a</td>
<td>Blueprint Reading for Welders &amp; Machinists</td>
<td>3.0</td>
</tr>
<tr>
<td>IND T B10</td>
<td>Occupational Readiness</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Industrial Technology, Welding Option Associate in Science Degree
Total Units: 37

Select from:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD B1a</td>
<td>Introduction to Oxygen Acetylene Welding and Cutting</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B1b</td>
<td>Introduction to the Welding Processes</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B53ab</td>
<td>Shielded Metal Arc Welding</td>
<td>4.0</td>
</tr>
<tr>
<td>WELD B55ab</td>
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</tr>
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<td>3.0</td>
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<td>Blueprint Reading for Welders &amp; Machinists</td>
<td>3.0</td>
</tr>
<tr>
<td>IND T B10</td>
<td>Occupational Readiness</td>
<td>3.0</td>
</tr>
</tbody>
</table>

WOODWORKING/CABINETMAKING

Woodworking/Cabinetmaking Job Skills Certificate
This certificate covers the principles of woodworking to include materials, hand tools, wood cutting machinery and wood finishing. Emphasis will be put on designs to include modular construction, new materials and processes. Advanced bidding techniques are discussed.

Upon completion of the following courses with at least a “C” grade in each course, the student will be awarded a Woodworking/Cabinetmaking Job Skills Certificate.
Total Units: 6

Select 6 units from the following courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOOD B1</td>
<td>Introduction to Woodworking Technologies</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B2</td>
<td>Furniture and Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B5</td>
<td>Intermediate Cabinetmaking</td>
<td>3.0</td>
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</table>

Cabinetmaking Certificate of Achievement
Total Units: 33

Required Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOOD B1</td>
<td>Introduction to Woodworking Technologies</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B2</td>
<td>Furniture and Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST B1</td>
<td>Introduction to Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B5</td>
<td>Intermediate Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B65a</td>
<td>Advanced Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B65b</td>
<td>Advanced Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL</td>
<td>Approved Course</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B50 or</td>
<td>Modern College Arithmetic &amp; Pre-Algebra</td>
<td>4.0</td>
</tr>
<tr>
<td>Math Placement Assessment Level 2 or Above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INDT B10</td>
<td>Introduction to Industrial Drawing and Graphics</td>
<td>1.0</td>
</tr>
<tr>
<td>INDT B10</td>
<td>Occupational Readiness</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives: to equal at least 33 units

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDT B249ab</td>
<td>Cooperative Work Experience Education</td>
<td>1-4.0</td>
</tr>
<tr>
<td>INDT B274</td>
<td>Special Problems in Woodworking</td>
<td>2-3.0</td>
</tr>
<tr>
<td>Course Number</td>
<td>Title</td>
<td>Units</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>WOOD B1</td>
<td>Introduction to Woodworking Technologies</td>
<td>3.0</td>
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</tr>
<tr>
<td>WOOD B65a</td>
<td>Advanced Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B65b</td>
<td>Advanced Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B1</td>
<td>Introduction to Forestry</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B11</td>
<td>Introduction to Computer Aided Drafting and Design (CAD)</td>
<td>1.0</td>
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<tr>
<td>INDR B20a</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B10</td>
<td>Introduction to Industrial Drawing and Graphics</td>
<td>1.0</td>
</tr>
<tr>
<td>CNST B1</td>
<td>Introduction to Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>INDT B10 or</td>
<td>Occupational Readiness</td>
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<tr>
<td>Equivalent</td>
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**Suggested Electives**

<table>
<thead>
<tr>
<th>Course Number</th>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>FORE B2</td>
<td>Natural Resources</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B30b</td>
<td>Industrial Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>MFGT B1ab</td>
<td>Machine Tool Processes</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Course Descriptions
Reading, Writing and Mathematics Classifications

Bakersfield College places students into courses with prerequisites on the basis of placement tests, previous school transcripts, and state requirements. If students have taken the college placement test or met with a counselor, the registration system will allow registration. Placement levels indicated in the first row of the chart are determined by your test scores and correspond to courses listed under the placement level. It is important to discuss program plans and high school courses with a BC counselor or advisor before registering.

Courses listed in boxes that are shaded are transfer level courses that are accepted for transfer to most four-year colleges and universities.

### MATH

<table>
<thead>
<tr>
<th>Course Basic Code</th>
<th>4 Levels Prior to Transfer</th>
<th>3 Levels Prior to Transfer</th>
<th>2 Levels Prior to Transfer</th>
<th>1 Level Prior to Transfer</th>
<th>Transfer Level</th>
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<tbody>
<tr>
<td>CB21D</td>
<td>CB21C</td>
<td>CB21B</td>
<td>CB21A</td>
<td>Transfer Level</td>
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</tr>
<tr>
<td>Placement Level</td>
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<td>01</td>
<td>02</td>
<td>03</td>
<td>04</td>
</tr>
</tbody>
</table>

**Non-Science Track**

- ACDV B78
- MATH B50
- MATHBA
- MATH BD
- MATH B2
- MATH B4a
- MATH B16
- MATH B22
- MATH B23
- PSYC B5

**Science Track**

- ACDV B78
- MATH B50
- MATHBA
- MATH BD
- MATH B1a
- MATH B1b
- MATH B6a

### WRITING, READING AND ESL

<table>
<thead>
<tr>
<th>Course Basic Code</th>
<th>4 Levels Prior To Transfer</th>
<th>3 Levels Prior To Transfer</th>
<th>2 Levels Prior To Transfer</th>
<th>1 Level Prior To Transfer</th>
<th>Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>CB21D</td>
<td>CB21C</td>
<td>CB21B</td>
<td>CB21A</td>
<td>Transfer Level</td>
<td></td>
</tr>
<tr>
<td>Placement Level</td>
<td>00</td>
<td>01</td>
<td>02</td>
<td>03</td>
<td>04</td>
</tr>
</tbody>
</table>

**Writing**

- See Counselor
- ACDV B68
- ENGL B60
- ENGL B50
- ENGL B1A

**Reading**

- See Counselor
- ACDV B91
- ACDV B62
- ACDV B50 (recommended)
- LEVEL 6 COURSES

**English as a Second Language, Writing**

- See Counselor
- ENSL B80
- ENSL B70
- ENSL B60
- ENSL B50
- ENGL B1A

**English as a Second Language, Reading**

- See Counselor
- See Counselor
- ENSL B61
- ENSL B51
- ENSL B31
- Level 6 Courses

**English as a Second Language, Speech/Listening**

- See Counselor
- ENSL B71ab
- ENSL B71cd
- ENSL B21
- ENSL B22
- COMM B1
- COMM B2
- COMM B4
- COMM B8

= Transfer Level
**COURSE DESCRIPTIONS**

**Course Description Abbreviations**

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; BC GE Bakersfield College General Education; CSU GE California State University General Education; IGETC Intersegmental General Education Transfer Curriculum; C-ID Course Identification Numbering System. Hours are total hours for the course. 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.

**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; Occupational Education.

**Course Numbering System and Transferability of Bakersfield College Courses**

Transfer courses in the Bakersfield College curriculum are generally numbered 1 through 49. For information about the transferability of a specific course, please see the course description. 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**

Many 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 Bakersfield College 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.org is the official repository of articulation for California’s colleges and universities. Visit www.ASSIST.org to see which Bakersfield College courses are articulated.

**Variable Topics Courses and UC Transferability**

Variable topics courses are also called “Independent Studies,” “Special Studies,” “Special Topics,” “Internships,” etc. UC credit for variable topics courses is given only after a review of the course outline by the enrolling UC campus. This usually occurs after transfer and may include recommendations from faculty. UC credit is not given for variable topics courses in Journalism, Photography, Health, Business Administration, Architecture, Administration of Justice (Criminology) or Library Departments due to credit restrictions in those areas.

**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 - 1 level prior to transfer. **Hours:** 18 lect/disc, 54 supervised tutoring. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

**ACDV B5a Tutor Training and Practicum (1 unit)**

This course is designed for returning tutors to build tutoring skills. 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 - 1 level prior to transfer. **Hours:** 9 lect/disc, 27 supervised tutoring. **Repeat:** 3. **Offered:** F, S. **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 (which may include 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 - 2 levels prior to transfer or successful completion of ACDV B62 or ENSL B61 with a grade of C or better. **Hours:** 54 lect/

ACDV B55 First Year Student Success (0.5 unit)
Introduces the college’s academic, social, and physical environments and promotes personal development necessary for student success. To increase their probability of college success, students will locate, navigate, and utilize the campus’ academic and student services resources. The course covers note-taking, test-taking, textbook reading, effective communication, and time-management skills necessary for college success. Hours: 9 lect/disc. Repeat: 2. Offered: F. 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 and reading comprehension and flexibility. Focuses on demonstration and application of reading strategies as they apply to textbook reading. Includes paragraph analysis, study strategies such as SQ3R and outlining, and vocabulary building techniques. Practice in application and analysis level thinking skills. Prerequisite: Reading - 3 levels prior to transfer or successful completion of ACDV B91 or ENSL B61 with a grade of C or better. Recommended: English Level 3 or ENSL B80 with a grade of C or better or concurrent enrollment in ACDV B66 or ACDV B201a. Hours: 54 lect/disc. 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. Recommended: Concurrent enrollment in ACDV B280 or B281. Hours: 18 lect for each unit. Repeat: 3. CCS: Precollegiate - Basic Skills. Not Transferable: Not degree applicable.

ACDV B68 Basic Writing Development (4 units)
Designed to prepare students for success in English B60 by developing sentence writing skills in the context of a paragraph. Emphasizes writing practice and the review of basic grammatical structures, writing mechanics, and proper language usage. Prerequisite: English Level 3 or successful completion of ENSL B80 with a grade of C or better. Recommended: Reading - 3 levels prior to transfer or successful completion of ACDV B91, completion of or concurrent enrollment in ACDV B201b with a grade of C or better. Hours: 72 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. Students work interactively in small groups, whole class and independently through guided instruction and hands-on activities to improve skills in the following areas: Topics: B70a-Time Management; B70b-Notetaking; B70c-Textbook Reading; B70d-Test Taking; B70e-Memory; B70f-Vocabulary. (Offered for Pass/No Pass grading only). Recommended: Reading - 2 levels prior to transfer or completion of ACDV B62 with a grade of C or better. Hours: 9 lect, 6 lab arranged for each 0.5 unit. Offered: F, S, SS. CCS: Precollegiate - basic skills. Not Transferable: Not degree applicable.

ACDV B78 Understanding Basic Math (3 units)
This course provides an emphasis on basic arithmetic operations including whole numbers, fractions, decimals and percents to increase probability of success in future math courses. Prerequisite: Qualifying score on math placement assessment. Recommended: Reading - 3 levels prior to transfer or completion of ACDV B91 with a grade of C or better. Hours: 54 lect. Offered: F, S, SS. 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 the class. Individual prescriptions may include a broad range of communication skills or be limited to specific problems. Prerequisite: Reading - 4 levels prior to transfer. Recommended: Writing - 3 levels prior to transfer and concurrent enrollment in ACDV B201a. Hours: 54 lect. 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)
Provides individual computer access assessment. Based on the findings, students are trained on the appropriate access technologies (text-to-speech, voice recognition, reading and writing tools, etc.). Designed to teach the fundamental access technologies needed for the student to complete writing assignments, web search projects, and to be independent in other courses. Hours: 9 lect. Offered: F, S. Repeat: 3. CCS: Precollegiate-Basic Skills. Not Transferable: Not degree applicable.

ACDV B195 Word Processing for Students With Disabilities (3 units)
Fundamentals of word processing using methods and materials designed for students with various disabilities. Recommended: Reading - 4 levels prior to transfer. Hours: 54 lect. Offered: F, S, SS. Repeat: 1. CCS: Precollegiate - basic skills. Not Transferable: Not degree applicable.

ACDV B201ab Communication Skills (0.5-1 units, limit 8 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. Open entry/open exit. Offered: F, S, SS. Repeat: 3. CCS: Precollegiate - basic skills. Not Transferable: Not degree applicable.

ACDV B201A Reading

ACDV B201B Writing

ACDV B280 Supervised Tutoring (0 units)
Provides tutoring in various academic subjects, conducted in a designated learning center, to augment classroom instruction. Referral by subject-area instructor, counselor, or tutor trainer is suggested. Hours: 1-54 individualized instruction or supervised lab. Open entry/open exit. Offered: F, S, SS. Repeat: Unlimited. CCS: Precollegiate - basic skills. Not Transferable: Not degree applicable.

ACDV B281abc Supervised Tutoring-Computer (0 units)

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 audio tapes, computers, and exercises. Hours: 27-54 lab. Open entry/open exit within a semester but not beyond a semester. Offered: F, S. Repeat: 3 or until 2 units is reached. CCS: Precollegiate - basic skills. Not Transferable: Not degree applicable.

ACCOUNTING
See Business Administration

ADMINISTRATION OF JUSTICE
Note: ADMJ courses numbered B1 through B12 have been changed to CRIM and fall under Criminal Justice. The following courses are Public Safety Training courses. For further information call the office of Public Safety Training Programs at 395-4044.

ADMJ B60 PC 832, Arrest and Control Techniques (1 unit)
Introduces methods and regulations used by peace officers regarding the powers of arrest and laws of search and seizure. Students will engage in weaponless self defense and physical arrest activities. Designed to meet the requirements of California Penal code section 832 which establishes a minimum mandatory standard of training for peace officers in the state of California. Hours: 30 lect, 10 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

ADMJ B61 PC 832 Firearms Training (PC 832) (0.5 unit)
Provides students with the competencies required for certification by Peace officer Standards and Training (P.O.S.T.) for Penal Code 832, Firearms. Students will engage in the use of firearms which will include handgun familiarization, safety, care, cleaning and storage, and firearms range qualification. Per Penal Code section 13511.5, students must obtain written clearance from the California Department of Justice verifying that they are not prohibited from possessing firearms. Prerequisite: ADMJ B60 with a grade of C or better. Hours: 8 lect, 16 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

ADMJ B62 Campus Security Supervisor (1 unit)
Provides students with the required competencies in accordance with SB1626. Hours: 16 lect, 16 lab. Offered: F, S. CCS: Occupational Education. Not Transferable: Not degree applicable.

ADMJ B63 Bureau of Security and Investigative Services Occupational License (BSIS-Security Guard Course) (0.2 units)
Provides the student with the knowledge and skills to pass the State of California mandated exam for a Security Guard card and to function at the entry level of the security profession. This class meets the certification requirements for the Bureau of Security and Investigative Services from the California State and consumer Services Agency. Hours: 8 lect. CCS: Occupational Education. Not Transferable: Not degree applicable.

ADMJ B65 Emergency/Commercial Vehicle License Preparation (1 unit)
Designed to prepare students for taking the California Class A/B written driving test, thereby enabling the successful examinee to obtain a California Class A/B learner permit. Hours: 24 lect, 16 lab. 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: 960 lect/lab. CCS: Occupational Education. Not Transferable: Associate Degree only.
ADMINISTRATION OF JUSTICE

ADMJ B69 Public Safety Dispatcher (4 units)
Provides students with the required competencies and certifications for P.O.S.T. Public Safety Dispatcher.
Hours: 90 lect, 30 lab. CCS: Occupational Education. Not Transferable: Not degree applicable.

ADMJ B71 Special Topics (0.5 - 3 units)
Various mandated training topics required by P.O.S.T. Hours: 9 lect. for each 0.5 unit. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

ADMJ B78 Bakersfield Police Department Trainee Orientation (6 units)
The BPD POST Academy graduate trainee will have an understanding of the intra-departmental procedures and policies of the Bakersfield Police Department. Prerequisite: ADMJ B68 with a grade of C or better. Hours: 160 lect. Offered: F, S. CCS: Occupational Education. Not Transferable: Not degree applicable.

ADMJ B80 Law Enforcement Academy Instruction (1 unit)
The student will have an understanding of the methods of delivery of instructional material, use of visual aids, evaluation and remediation procedures. Hours: 26 lect, 14 lab. Offered: F, S. CCS: Occupational Education. Not Transferable: Not degree applicable.

ADMJ B81 Special Topics for Security Guards (0.2 unit)
Provides the required training security guards must complete within six months of employment as a security guard. Also covers the annual review and practice of security guard skills. This course meets the training requirements as set forth by the California Department of Consumer Affairs, Bureau of Security and Investigative Services. Hours: 8 lect for each topic. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

AGRI B1 Agriculture, Environment and Society (3 units)
Involves the sociology of agriculture presented through an examination of relationships between societies and their environments, economics, and agriculture. Emphasis on the analysis of agriculture’s use of technology and the corresponding impact on the environment, economy and society. Satisfies the 0.5 unit educational planning requirement for graduation from Bakersfield College. Recommended: Reading - 1 level prior to transfer. Hours: 54 lect. Offered: F, S. CCS: Occupational Education. Transferable: CSU and private colleges. BC GE D.2; CSU GE D.7; C-ID AG 112.

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 - 1 level prior to transfer. Hours: 54 lect, 54 lab. Field trips required. Offered: F, S. Repeat: 3. CCS: Occupational Education. Transferable: CSU and private colleges.

AGRI B70 Topics in Farm and Ranch Skills (2 units)
Development of hands-on farm and ranch skills. Hands on introduction of skills utilizing the following areas: crops, fruit production, livestock production, agricultural mechanics, farm management, landscape horticulture and natural resources. Hours: 108 lab arranged. Repeat: 3. CCS: Occupational Education. Not Transferable: Associate degree only.

AGRI 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 lab. Open entry/open exit. Offered: F, S, SS. CCS: Pre collegiate - basic skills. Not Transferable: Not degree applicable. Not open to students who have taken MATH B251.

AGRICULTURAL BUSINESS MANAGEMENT

AGBS B2 Agricultural Economics (3 units)
Core agriculture course; required of all agriculture majors. The place of agriculture and farming in the economic system; basic economic concepts and problems of agriculture; pricing and marketing problems, factors of production; state and federal farm programs affecting the farmer’s economic position. Prerequisite: Successful completion of or concurrent enrollment in MATH BA/B200A with a grade of C or better. Recommended: Reading - 1 level prior to transfer. Hours: 54 lect. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges. BC GE D.2; CSU GE D.2.

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 Outlook, Word, Excel, PowerPoint, Access, and FrontPage. Recommended: Reading - 1 level prior to transfer. Hours: 54 lect, 27 lab. Transferable: CSU and private colleges.

AGBS B6 Agriculture Sales and Communication (3 units)
The study of principles and practices of the selling process: selling strategies and approaches, why and how people buy, prospecting, territory management, and customer service. Self-management, communication, and interpersonal skills necessary in developing managerial abilities, leadership qualities, and facilitating teamwork within the agribusiness sector will be explored. Students will gain experience through opportunities to develop formal sales presentations and job shadowing. The course content is organized to give students an in-depth understanding of the factors and influences that affect the agribusiness industry on a day-to-day basis. (C-ID AG-AB 112L). Recommended: Reading - 1 level prior to transfer.
ANIMAL SCIENCE

ANSC B1 Introduction to Animal Science (3 units)
Survey of the livestock industry, supply of animal products and their uses; special emphasis on the origin, characteristics, adaptation, and contributions of farm animals to the global Ag industry; analysis of the economic trends and career opportunities in animal agriculture. Nutrition, digestive systems, breeds, selection, and reproduction are included in course. Recommended: Reading - 1 level prior to transfer. Hours: 36 lect, 54 lab. Field trips may be required. Offered: F, S. CCS: Occupational Education. Transferable: UC, CSU and private colleges.

ANSC B2 Beef Production (3 units)
Defines and Appraises all segments of the beef industry focusing on production, reproduction, marketing, and processing. History and development of important breeds and their contribution to the U.S. beef industry will be emphasized. Selection, nutrition, health management, handling, and processing will be defined, analyzed, and applied. Recommended: Reading - 1 level prior to transfer and Algebra. Hours: 36 lect, 54 lab. Field trips required. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges.

ANSC B3 Sheep Production (3 units)
Defines and appraises all segments of the sheep industry focusing on production, reproduction, marketing, and wool. History and development of important breeds and their contributions to the U.S. sheep industry will be emphasized. Selection, nutrition, health management, handling, and processing will be defined, analyzed, and applied. Recommended: Reading - 1 level prior to transfer and Algebra. Hours: 36 lect, 54 lab. Field trips required. CCS: Occupational Education. Transferable: CSU and private colleges.

ANSC B4 Dairy Production (3 units)
Defines and appraises all segments of the dairy industry focusing on production, reproduction, marketing and milk/dairy processing. History and development of important breeds and their contribution to the U.S. dairy industry will be emphasized. Selection, nutrition, health management, handling, and processing will be defined, analyzed and applied. Recommended: Reading - 1 level prior to transfer and Algebra. Hours: 36 lect, 54 lab. Field trips required. CCS: Occupational Education. Transferable: CSU and private colleges.

ANSC B5 Swine Production (3 units)
Application of the principles of nutrition, physiology, herd selection, breeding, and marketing to swine production and management. Structure of the industry, enterprise establishment, systems of production, production practices and herd improvement programs will be discussed. Evaluation of production responses and economic returns will be defined, analyzed, and applied. Recommended: Reading - 1 level prior to transfer and Algebra with a grade of “C” or better. Hours: 36 lect, 54 lab. Field trips required. Offered: S. CCS: Occupational Education. Transferable: CSU and private colleges.

ANSC B6 Applied Animal Nutrition (4 units)
Covers fundamentals of feeding livestock, including feed composition, feed nutrients and values, digestive systems of major livestock species and their utilization of feedstuffs, ration balancing, computer analysis of feed, and least cost formulation. Recommended: Reading - 1 level prior to transfer and Algebra with a grade of C or higher. Hours: 36 lect, 54 lab. Field trips required. Offered: S. CCS: Occupational Education. Transferable: CSU and private colleges.

ANSC B7 Animal Diseases (3 units)
Covers major, common diseases of farm livestock, focusing on the cause, symptoms, treatment, and prevention of the specific diseases. Students will learn fundamentals of the immune system and use of vaccines and pharmaceuticals. Safe use, particularly in food animals, is stressed. Recommended: Reading - 1 level prior to transfer and Algebra with a grade of C or higher. Hours: 54 lect, 54 lab. Field trips required. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges.

ANSC B10 Horse Production (3 units)
Defines and appraises all segments of the horse industry focusing on production, reproduction, selection, nutrition, behavior, handling, and safety. History and the development of important breeds and their contribution to the U.S. horse industry will be emphasized. Recommended: Reading - 1 level Level 5 or 6 and Algebra with a grade of “C” or higher. Hours: 36 lect, 54 lab. Field trips required. CCS: Occupational Education. Transferable: CSU ad Private colleges.

ANSC B11 Livestock Selection and Evaluation (3 units)
Application of objective and subjective measurements to establish economic value of livestock (includes use of ultrasound technology). Establishes the relationship of live animal traits to carcass quality and yield, production efficiency, breeding and market stock performance, and production records. Hours: 36 lect, 54 lab. Field trips required. Repeat: 3. CCS: Occupational Education. Transferable: UC, CSU and private colleges.
ANSC B20 Companion Animal Care (4 units)
Introduction to basic care and handling of common domestic companion animal species, handling and restraint, nutrition, reproductive processes, anatomy and physiology, diseases and animal/human companionship issues will be stressed. Recommended: Reading - 1 level prior to transfer. Hours: 18 lect, 54 lab. Field trips required. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

ANSC B22 Animals and Society (3 units)
Deals with the human/animal bond and the positive/controversial aspects of animals in human lives. Includes topics covering the scientific and psychological implications of animals in our society. Students will encounter and analyze social and ethical issues that affect society and veterinary medicine. Recommended: Reading - 1 level prior to transfer. Hours: 54 lect. CCS: Occupational Education. Transferable: UC, CSU and private colleges. Elective credit only.

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 - 1 level prior to transfer. Hours: 54 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 - 1 level prior to transfer. Hours: 18 lect, 54 lab. 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 causes, symptoms, prevention and recommended treatment. Recommended: Reading - 1 level prior to transfer. Hours: 18 lect. Field trips required. Repeat: 1. CCS: Occupational Education. Not Transferable: Associate Degree only.

ANSC B72 Equine Health (1 unit)
Covers cause, symptoms, treatment, and prevention of the major common diseases affecting horses, specifically those of economic importance in California. Emphasizes practical application of therapy in maintaining horse health. Recommended: Reading - 1 level prior to transfer and Algebra with a grade of C or higher. Hours: 18 lect and selected field trips. Field trips required. Offered: S. CCS: Occupational Education. Not Transferable: Associate Degree only.

ANSC B74 Equine Nutrition (1 unit)
Designed to meet the needs of horse owners and students seeking the knowledge necessary to meet the nutritional requirements of their horses. Fundamentals of feed values and nutritional requirements of the horse will be covered. Practical application of feed and cost management, as well as discussion of important nutrition related diseases of the horse will be emphasized. Recommended: Reading - 1 level prior to transfer and Algebra with a grade of C or higher. Hours: 18 lect and selected field trips. Field trips required. 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 - 1 level prior to transfer. Hours: 18 lect. Field trip required. CCS: Occupational Education. Not Transferable: Associate Degree only.

ANSC B78 Horsemanship (2 units)
Instruction in basic horsemanship skills, including handling, grooming and riding English and/or Western style. Course emphasizes safety for horse and riders. No experience, horse, or equipment required. Beginning to advanced riders. Students have option of participating in intercollegiate Horse Show Association competitions. Hours: 108 activity. Field trips required. Repeat: 3. CCS: Occupational Education. Not Transferable: Associate Degree only.

ANSC B80 Introduction to Veterinary Technology (2 units)
An introductory course intended to give the student an overview of statutes, regulations, and ethics pertaining to Registered Veterinary Technicians, and introduction to medical terminology as it pertains to animal health care, and an introduction to record keeping techniques and requirements. Recommended: ANSC B20 with a grade of C or higher (may be taken concurrently). Hours: 36 lect. Field trip required. CCS: Occupational Education. Not Transferable: Associate Degree only.

ANSC B82 Anatomy and Physiology of Domestic Animals (2 units)
Covers the anatomical and physiological similarities and differences of domestic animals. Integumentary, cardiovascular, respiratory, reproductive, gastrointestinal and neurological systems. Basic nutritional requirements of domestic animals will be presented in context of relating to development and health. Hours: 36 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

ANSC B84 Small Animal Diseases (1.5 units)
Presents knowledge of diseases in small animals, including diagnosis, prevention, and treatment programs. Includes instruction in physical diagnosis and discussion of tests and procedures needed for proper diagnosis. Also covers animal husbandry procedures relating to disease prevention. Disease entities to be taught include: infectious, nutritional, endocrine, and metabolic conditions. Prerequisite: ANSC B80 and B82
with a grade of C or better. **Hours:** 30 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ANSC B85 Large Animal Diseases (1.5 units)**
Covers diseases in large animals, including diagnosis, prevention, and treatment programs. Includes instruction in physical diagnosis and discussion of tests and procedures needed for proper diagnosis. Instruction in animal husbandry procedures relating to disease prevention is also included. Disease entities taught include infectious, nutritional, endocrine, mechanical and metabolic conditions. **Prerequisite:** ANSC B80 and B82 with a grade of C or better. **Hours:** 30 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ANSC B86 Pharmacology for Veterinary Technicians (1.5 units)**
Intended to instruct students with required knowledge of pharmacological and biological agents used in veterinary medicine, including calculations, classifications, action, and methods of administration, dispensing and labeling. FDA, USDA, and DEA guidelines regarding restricted and scheduled drugs, as they relate to small animals and residue avoidance in food animals. Dosages, agents, and administration of pharmaceuticals are covered. **Prerequisite:** ANSC B80 and ANSC B82 with a grade of C or better. **Hours:** 27 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ANSC B88 Surgery, Dental and Anesthesiology for Veterinary Technicians (1.5 units)**
Instruction in the identification and care of instruments, the importance of asepsis and sterilization techniques, surgical pack preparation, and draping techniques. Instruction of surgical and dental procedures and procedures for general and local anesthesia for veterinary medicine will be covered. **Prerequisite:** ANSC B80 and ANSC B82 with a grade of C or better. **Hours:** 30 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ANSC B90 Emergency Medicine, Surgery/Nursing Procedures for Veterinary Technicians (2 units)**
Provides the student with knowledge of emergency procedures for veterinary technicians, including client management, triage, supportive therapy, medicine, and surgery for the percutely ill patient. Nursing procedures as they relate to emergency and non-emergency care will be presented, including bandaging, splinting, casting, and fluid therapy. **Prerequisite:** ANSC B80 and ANSC B82 with a grade of C or better. **Hours:** 36 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ANSC B92 Clinical Pathology for Veterinary Technicians (2 units)**
Includes lectures in microbiology, parasitology, cytology, urinalysis, hematology, serology, and pathology. The student will be instructed in normal and abnormal test values.

Covers the understanding, reading and application of specific test results. Also covers specimen handling and necropsy techniques. **Prerequisite:** ANSC B80 and B82 with a grade of C or better. **Hours:** 36 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ANSC B94 Caged Birds, Laboratory, and Exotic Animal Medicine (2 units)**
Covers anatomy, physiology, disease descriptions, and identification of caged birds, laboratory, and exotic animals. Instruction in restraint, physical examination, anesthesia, surgery, specimen collection, species identification, and the legal ramifications of owning exotic animals. **Prerequisite:** ANSC B80 and B82 with a grade of C or better. **Hours:** 36 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ANSC B96 Radiology, Ultrasound, and Diagnostic Imaging for Veterinary Technology (1.5 units)**
Course is intended to give the student a sound knowledge of the techniques used in physical imaging in veterinary medicine. Includes history, statutes, and regulations, positioning techniques, developing, and film and screen characteristics. **Prerequisite:** ANSC B80 and B82 with a grade of C or better. **Hours:** 30 lect. **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, vegetable, tree, and vice crops; basic botany, classification of plants, soils, seedling, fertilizers, irrigation, pest control, and harvest plus specific practices for crops grown in the San Joaquin Valley. Students who have previously successfully completed the course may repeat when needed for state mandated pest control license. Students must obtain a special override from the Admissions and Records Office. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect, 36 lab. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. BC GE B.1

**CRPS B2 Forage Crops (3 units)**
Study of important forage crops of California and the nation; species, varieties, adaptations, production methods, feeding qualities, and processing. Students who have previously successfully completed the course may repeat when needed for state mandated pest control license. Students must obtain a special override from the Admissions and Records Office. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 36 lect, 54 lab. Field trips required. **Offered:** alternate S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only.
AGRICULTURE

CRPS B3 Integrated Pest Management (3 units)
Fundamental principles of pest control and management in commercial agriculture. Includes pestilence diagnosis and methods of chemical, physical, and biological control. Students who have previously successfully completed the course may repeat when needed for state mandated pest control license. Students must obtain a special override from the Admissions and Records Office. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 36 lect, 54 lab. Field trips required. **Offered:** F. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Elective credit only. BC GE B.1

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 - 1 level prior to transfer. **Hours:** 36 lect, 54 lab. Field trips may be required. **Offered:** F. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges. **Note:** Elective credit only.

CRPS B10 Plant Biology (4 units)
An introductory course covering the fundamental principles of plant science with emphases on structure, function, reproduction, and development of seed plants. The principles are related to the practices of applied plant biology in crop production, forestry, and horticulture. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 36 lect, 54 lab. CCS: Occupational Education. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken BIOL B10. BC GE B.1; CSU GE B.2, B.3; IGETC 5.B.

ENVIRONMENTAL HORTICULTURE

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:** 36 lect, 54 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 - 1 level prior to transfer. **Hours:** 36 lect, 54 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 - 1 level prior to transfer. **Hours:** 36 lect, 54 lab. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

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 - 1 level prior to transfer. **Hours:** 36 lect, 54 lab. Field trips required. **Offered:** F. **CCS:** Occupational Education. **Transferable:** UC, 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 - 1 level prior to transfer. **Hours:** 18 lect. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.
ORNH B36 Beginning Floral Design (3 units)
Introduction to the fundamentals of theory, techniques and skills currently practiced in the floral industry. Includes applied art principles, cut flower care, handling practices, proper use of florst tools and materials, pricing of floral products and use of current floral business technology. Includes constructing corsages, floral arrangements, and foliage plant items, which meet floral industry standards. Recommended: Reading - 1 level prior to transfer. Hours: 36 lect, 54 lab. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only. BC GE C.

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 - 1 level prior to transfer. Hours: 54 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 - 1 level prior to transfer. Hours: 18 lect. 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 - 1 level prior to transfer. Hours: 18 lect. 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 lect. CCS: Occupational Education. Not Transferable: Not degree applicable.

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 - 1 level prior to transfer. Hours: 54 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 - 1 level prior to transfer. Hours: 54 lect. Field trips required. Offered: F, S. CCS: Occupational Education. Transferable: UC, CSU and private colleges. BC GE B.1; CSU GE E.

FORE B3 Wildlife Management (3 units)

FORE B4 Wildlife Law Enforcement (3 units)

FORE B5 Identification of California Wildlife (3 units)

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 - 1 level prior to transfer. Hours: 36 lect, 54 lab. Field trips required. CCS: Occupational Education. Transferable: CSU and private colleges. Transfers as an Agriculture elective.

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 - 1 level prior to transfer. Hours: 54 lect. Field trip required.
AGRICULTURE

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 - 1 level prior to transfer. Hours: 54 lect. Field trips required. Offered: S. 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 - 1 level prior to transfer. Hours: 36 lect, 54 lab. Field trips required. Offered: S. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

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 - 1 level prior to transfer. Hours: 54 lect. Field trips required. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges.

SOIL

SOIL B1 Introduction to Soil Science (3 units)
Core agriculture course; required of all agriculture majors. Problems pertaining to the soil which are important in the profitable production of plants, including physical properties of soils, fertilizers, crop rotation, erosion and salt control, cultivation problems and irrigation. Recommended: Reading - 1 level prior to transfer. and MATH BA. Hours: 36 lect, 90 lab. Field trips required. Offered: F. CCS: Occupational Education. Transferable: UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 3.B, 6.

AIR CONDITIONING & 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 with a grade of C or better. Recommended: ACRF B54a: Math BA or equivalent (may be taken concurrently), ELET B1. Hours: 18 lect, 90 lab for each 3 units. Offered: B54a F; B54b S. Repeat: 1. CCS: Occupational Education. Not Transferable: Not degree applicable.

AMERICAN SIGN LANGUAGE

ASL B1 American Sign Language 1 (5 units)

ASL B2 American Sign Language 2 (5 units)

ASL B3 American Sign Language 3 (5 units)

ASL B4 American Sign Language 4 (5 units)
Advanced study of American Sign Language. Emphasis is on receptive and expressive conversational fluency in contrasting hearing and deaf rhetorical approaches. Focus on specific linguistic aspects of ASL such as classifiers and role-shifting. Advanced practice with receptive and expressive fingerspelling. Also includes issues pertinent to deaf culture. Prerequisite: ASL B3 with a grade of C or better. Recommended: Reading - 1 level prior to transfer. Hours: 90 lect. Field trips required. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C; IGETC 6.

ASL B6 American Deaf Culture (3 units)
Introduction to the practical and 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 with a grade of C or better. Hours: 54 lect. Field trips required. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges.

ASL B7 ASL Literature and Performance (3 units)
Exploration and analysis of storytelling, folklore, poetry, and music of the American Deaf community. Analysis and interpretation of musical lyrics into visual concepts; study and performance of ASL poetry, hand-shape and ABC stories. Study of Deaf folklore and other forms of "oral" storytelling traditions. Performance required. Prerequisite: ASL B2 with a grade of C or better. Hours: 54 lect. Field trips required. CCS: Liberal Arts & Sciences. Transferable: CSU and private colleges. BC GE C. Note: Elective Credit only.

ANTHROPOLOGY

ANTH B1 Physical Anthropology (3 units)
Study of human biology through time. Examines the biological development of the hominin lineage with consideration of cultural developments. Topics include biology and genetics, evolutionary processes and speciation, nonhuman primates, examination of the hominin lineage through fossils and molecular data, technological developments, and human diversity. Recommended: Reading and Writing - 1 level prior to transfer. Hours: 54 lect. Offered: F or S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE B.1; CSU GE B.2; IGETC 5B.

ANTH B2 Cultural Anthropology (3 units)
Scientific study of contemporary cultures and their lifeways. Focuses on behavioral patterns, learning, diversity, and culture as an adaptive mechanism. Emphasis is on examining the constituents of cultural systems holistically, and comparatively analyzing world cultures. Examples from cultures worldwide are presented in various formats. Recommended: Reading and Writing - 1 level prior to transfer. Hours: 54 lect. Offered: F, S, SS. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE D.2; CSU GE D.1; IGETC 4.

ANTH B3 Introduction to Archaeology (3 units)
Scientific study of past cultures and culture change. Emphasizes reconstruction of past lifeways through systematically examining material remains. Topics include fieldwork techniques, data analysis, dating methods, cultural change and adaptation, interpreting behavior patterns of past cultures, interactions between cultures and environments, and managing archaeological remains. Recommended: Reading and Writing - 1 level prior to transfer. Hours: 54 lect. Field trips may be required. Offered: F or S. CCS: Liberal Arts and Sciences. Transferable: UC, CSU, and private colleges. BC GE D.2; CSU GE D.1; IGETC 4.

ANTH B5 North American Indians (3 units)
Detailed examination and comparative study of Native Peoples of North America from initial peopling of the New World to today. Topics include Native Peoples today, policies and laws, culture areas of North America, and specific cultures. Emphasis on pre-contact lifeways, cultural interactions, and cultural adaptations to environmental situations through time. Recommended: Reading and Writing - 1 level prior to transfer. Hours: 54 lect. Offered: F or S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE D.2; CSU GE D.1, D.3; IGETC 4.

ANTH B21 Special Projects/Anthropology (1 unit. Limit 4 units)
Application of anthropological knowledge and techniques to real world situations through (a) the formulation and completion of an anthropological research project, or (b) complete an Internship by working for local museums or similar organizations, engaging in a variety of tasks related to one or more areas of anthropology. Prerequisite: Limitation or Enrollment: Student must complete an introductory course in Anthropology and be approved for enrollment by the instructor. Recommended: ANTH B1 or ANTH B2 with a minimum grade of “B” and evaluation by instructor. Hours: 54 lab. Repeat: 3, or until a maximum of 4 units is reached. CCS: Liberal Arts & Sciences. Transferable: CSU and private colleges. Note: Not open to students who have completed the equivalent course, ANTH B21abcd.

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 and the design process. Guest speakers. Satisfies 0.5 unit counseling requirement for graduation from B.C. Hours: 27 lect. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges.

ARCH B6 Materials of Construction (3 units)

ARCH B11 Design and Perspective Drawing (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: 36 lect, 108 lab. Offered: F. CCS: Occupational Education. Transferable: UC, CSU and private colleges.

ARCH B12 Design, Drawing and Color (4 units)
Drawing as a communication tool in the environmental design fields with further development of freehand and digital drawing with the addition of color application. Demonstrates the
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 with a grade of C or better. Hours: 36 lect, 72 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 - 1 level prior to transfer. Hours: 54 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 - 1 level prior to transfer. Hours: 54 lect. Field trips required. Offered: S. CCS: Occupational Education. Not Transferable: Associate Degree only.

ART

ART B1 Art Appreciation (3 units)
Lecture course which presents a broad introduction to the visual arts from prehistory to the present. The role of art in the creation of world culture, as well as art processes and visual vocabulary are examined. Intended for non-art majors. Recommended: Reading and Writing - 1 level prior to transfer. Hours: 54 lect. Offered: F. S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C; CSU GE C.1; IGETC 3.A.

ART B2 Drawing I (3 units)
Course introduces the fundamentals of representation drawing. The visual vocabulary and design principles and elements are covered, as related to drawing. Media may include pencil, ink, charcoal, conte, pastels, and watercolor. Recommended: Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. Offered: F, S. SS. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C; CSU GE C.1; IGETC 3.A.

ART B3 Drawing II (3 units)
A continuation of ART B2. Course builds on the conceptual and technical aspects of drawing; as well as an increased exploration of media and techniques. An increased use of color is required. Prerequisite: ART B2 with a grade of “C” or better. Recommended: Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. CCS: Liberal Arts and Sciences. Transferable: CSU and private colleges.

ART B4 Two Dimensional Design (3 units)
Course examines the principles and elements of two-dimensional design. Content includes: elements and principles of design, color theory, art terminology, and analysis of form and content. Recommended: Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C; CSU GE C.1; IGETC 3.A. Note: formerly ART B3ab. Not open to students who have taken the equivalent course, ART B3ab.
ART B5 Three Dimensional Design (3 units)
An introduction to form, structure, the elements of design and three dimensional design theory. This course includes an exploration of various materials and techniques, with an emphasis on the creative process. Recommended: Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges. Note: formerly ART B21. Not open to students who have taken the equivalent course, ART B21ab.

ART B6 Acrylic Painting I (3 units)
Course introduces the use of acrylic paint as an expressive medium. Tools, techniques, compositional elements, color theory, and craftsmanship as applied to painting are covered. Prerequisite: ART B2 with a grade of “C” or better. Recommended: Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. Note: formerly ART B4ab. Not open to students who have taken the equivalent course, ART B4ab.

ART B7 Acrylic Painting II (3 units)
A continuation of ART B6. Students review and refine techniques using acrylic paint as an expressive medium. Emphasis is placed upon personal explorations. Prerequisite: ART B6 with a grade of “C” or better. Recommended: Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. Note: formerly ART B4cd. Not open to students who have taken the equivalent course, ART B4cd.

ART B8 Figure Drawing I (3 units)
An introductory course in drawing from live models. Emphasis is placed upon an understanding of the structure, anatomy, and expression of the human figure. Media may include pencil, ink, charcoal, conté, pastels, and watercolor. Prerequisite: ART B2 with a grade of “C” or better. Recommended: Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. Note: formerly ART B2ef. Not open to students who have taken the equivalent course, ART B2ef.

ART B9 Figure Drawing II (3 units)
Drawing course, using live models, is a review and refinement of drawing techniques and exercises that are introduced in ART B8. Emphasis is placed upon a more personal expression of the human figure. Media may include pencil, ink, charcoal, conté, pastels, and watercolors. Prerequisite: ART B8 with a grade of “C” or better. Recommended: Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. Note: formerly ART B2gh. Not open to students who have taken the equivalent course, ART B2gh.

ART B10 Ceramics I (3 units)
An introductory level ceramics course in which students design and construct hand-built and wheel-thrown ceramic objects. Students learn form and surface enrichment, use glazes, and load kilns. Serves students interested in developing fundamental ceramic skills. Recommended: Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C.

ART B11 Ceramics II (3 units)
A continuation of ART B10. Expanding the skills in forming techniques, wheel throwing and slab construction; various glaze applications. Exploration of building and surface treatments including slip casting, site specific and installation work. Raku and other firing techniques are covered. Prerequisite: ART B10 with a grade of “C” or better. Recommended: Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. Note: formerly ART B7ab. Not open to students who have taken the equivalent course, ART B7ab.

ART B12 Ceramics III (3 units)
Designed for students interested in developing a personal style in their work. Advanced wheel-throwing and hand building techniques, glaze application and formulation. Includes theory and practical application of kiln operation, electric and gas fired, oxidation and reduction. Prerequisite: ART B11 with a grade of “C” or better. Recommended: Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. Note: formerly ART B7ef. Not open to students who have taken the equivalent course, ART B7ef.

ART B13 Sculpture I (3 units)
Introduces sculptural concepts and investigates their translation into three-dimensional forms. Problems involving various technical means are explored. Students investigate the role of materials and techniques in the creative process. Prerequisite: ART B5 with a grade of “C” or better. Recommended: Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. Note: formerly ART B11ab. Not open to students who have taken the equivalent course, ART B11ab.

ART B14 Sculpture II (3 units)
Advanced study in sculptural concepts and three-dimensional forms. Explores the expressive meaning of form and the expressive potential of materials. Prerequisite: ART B13 with a grade of “C” or better. Recommended: Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. Note: formerly ART B11cd. Not open to students who have taken the equivalent course, ART B11cd.

ART B16 Digital Photography (3 units)
Introduction to the possibilities of digital photography. Topics covered include digital cameras, scanning, printing, color management and file management. Students create original images for use in class and explore photo manipulation with raster software. A suitable digital camera is required.
ART B17 Black and White Photography (3 units)
In this black and white photography course, students study the basic principles of cameras, optics, light, film development, exposure, exposure meters and enlarging. Photographic quality, exploration of the photographer’s environment, and personal expression is emphasized. A suitable 35mm film camera is required. Recommended: Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. CCS: Occupational Education. Transferable: UC, CSU and private colleges. BC GE C. Note: formerly ART B17ab. Not open to students who have taken the equivalent course, ART B17ab.

ART B20 Digital Art - Vector Art (3 units)
A foundational course introducing vector art and the use of digital technology as a design tool. Through a series of projects, students create original artwork and explore elements and principles of design. Recommended: Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. CCS: Occupational Education. Transferable: CSU and private colleges. BC GE C.

ART B24 Digital Art - Raster Art (3 units)
Introduces raster art as used in commercial digital media. Through a series of projects, students create original artwork and refine their design skills. Image creation, scanning, editing, composition, re-touching, and problem solving are explored. Elements, principles and language of design are reviewed. Prerequisite: ART B20 with a grade of “C” or better. Recommended: Writing and Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. CCS: Occupational Education. Transferable: CSU and private colleges. BC GE C.

ART B25 Typography (3 units)
This course focuses on effective letterform usage in visual media. Students create typographic design solutions and explore the evolution of letterforms from ancient to contemporary. Projects feature investigation of structure, format, legibility, and expression. Prerequisite: ART B20 and ART B24 with a grade of “C” or better. Recommended: Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. CCS: Occupational Education. Transferable: CSU and private colleges.

ART B29 Special Studies in Art (1-3 units. Limit 9 units)
Independent study course intended for students pursuing deep exploration into a specific body of work. Content and unit credit are determined by the instructor and student in consultation. Enrollment by permission of instructor only. Recommended: Limitation on enrollment. Student must have successfully completed a sequence of courses and have approval by professor after a portfolio review. Hours: 54-162 lab. 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.

ART B35 Survey of Western Art I (3 units)
This course is a historical survey of Western architecture and visual arts beginning in the Paleolithic age (30,000 BC) and continuing through Proto-Renaissance Europe (1400 CE). Recommended: Reading and Writing - 1 level prior to transfer. Hours: 54 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges. BC GE C, CSU GE C.1. IGETC 3A.

ART B36 Survey of Western Art II (3 units)
This lecture course is a historical survey of Western architecture and visual arts from 1400 CE to the present day. Recommended: Reading and Writing - 1 level prior to transfer. Hours: 54 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges. BC GE C, CSU GE C.1, IGETC 3a.

ART B37 Survey of Art - Latin America (3 units)
Historical survey of the arts in Latin America. Focuses on the Spanish-speaking regions of the Americas, as well as Cuba and the Dominican Republic. Students examine artistic contributions by Latin American artists from pre-history through colonial and modern art forms. Recommended: Reading and Writing - 1 level prior to transfer. Hours: 54 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges. Note: Formerly ART B30e. Not open to students who have taken the equivalent course, ART B30e or CHST B30e. BC GE C; CSU GE C.1; IGETC 3A.

ART B40 Digital Illustration (3 units)
Course introduces illustration for editorial, technical, scientific, and informational publication. Emphasis is placed on problem solving and the importance of concept development. Typography is considered as an integral element to illustration projects. Prerequisite: ART B20 with a grade of “C” or better. Recommended: Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. CCS: Occupational Education. Transferable: CSU and private colleges. Note: formerly ART B22. Not open to students who have taken the equivalent course, ART B22.

ART B41 Advertising Design (3 units)
Course focuses on the design of advertising. Through concept development, type and images, students create original advertising solutions. A broad study of advertising media will be explored. Prerequisite: ART B25 with a grade of “C” or better. Recommended: Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. CCS: Occupational Education. Transferable: CSU and private colleges. Note: formerly ART B23. Not open to students who have taken the equivalent course, ART B23.

ART B42 Graphic Design (3 units)
Course in design with an emphasis on visual communication. Through concept development, type, and images, students create original design solutions. Identify and branding development is introduced. Prerequisite: ART B40 and ART B41 with a grade of “C” or better. Recommended: Reading - 1 level prior to transfer. Hours: 27 lect, 81 lab. CCS:
Occupational Education. **Transferable:** CSU and private colleges. **Note:** formerly ART B21. Not open to students who have taken the equivalent course, ART B21.

**ART B46 Advanced Photography I (3 units)**
Course focus is on review and refinement of photography skills, with an emphasis on personal expression. A suitable SLR camera is required. **Prerequisite:** ART B16 or ART B17 with a grade of “C” or better. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 27 lect, 81 lab. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges. **Note:** formerly ART B17cd. Not open to students who have taken the equivalent course, ART B17cd.

**ART B47 Advanced Photography II (3 units)**
Course is a study of photography in an area of specialized and personal interest. Advanced work is done in camera technique, printing practices and studio lighting. Students create technically proficient work of an expressive and original nature. A suitable SLR camera is required. **Prerequisite:** ART B46 with a grade of “C” or better. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 27 lect, 81 lab. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges. **Note:** formerly ART B17gh. Not open to students who have taken the equivalent course, ART B17gh. Elective credit only.

**ART B48 Advanced Photography III - Independent Study (1-3 units)**
Strengthening of graphic visualization and technical skills through challenging individual assignments in preparation for professional experience. A suitable manually adjustable camera is required. Content and unit credit are determined by the instructor and student in consultation. Enrollment by permission of instructor only. **Prerequisite:** ART B47 with a grade of “C” or better. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54-162 lab. **CCS:** Liberal Arts & Sciences. **Transferable:** UC and private colleges. **Note:** formerly ART B18ab. Not open to students who have taken the equivalent course, ART B18ab. Elective credit only.

**ASTRONOMY**

**ASTR B1 Physics of the Cosmos (3 units)**
Introductory course emphasizing the application of physics to understand the physical processes on the Earth and beyond the Earth and how we know those processes are occurring while still being bound to the earth (or our solar system). The process and philosophy of science are examined from the astronomical perspective. Among topics included: the motions, properties, and evolution of the Sun, planets (including exoplanets), stars, galaxies, and the universe and how we know about them; the analysis of electromagnetic radiation; atomic structure; astronomical instruments; brief history of astronomy; Newton’s law of gravity; general relativity. **Prerequisite:** Reading - One level prior to transfer. **Recommended:** Math BA with a grade of “C” or equivalent. **Hours:** 54 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE B.1; CSU GE B.1; IGETC 5.A.

**ASTR B2 Life in the Universe (3 units)**
Introductory course on the scientific search for life in the universe. The process and philosophy of science are examined from the astronomical and biological perspectives. Among topics included: the definition and nature of life, the formation and development of the Earth and life on the Earth, other places in our solar system that might have habitats for life, habitable zones around other stars, how we detect extrasolar planets, how we could detect biological activity on extrasolar planets, the search for extraterrestrial intelligence, interstellar travel, and implications of making contact. **Prerequisite:** Reading - 1 level prior to transfer. **Recommended:** MATH BA with a grade of “C” or better. **Hours:** 54 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE B.1, CSU GE B.1, IGETC 5A.

**ASTR B3 Solar System (3 units)**
Introductory course on the Sun, Earth, other planets, moons, rings, comets, asteroids, and extrasolar planets, formation and development of the Earth and solar system, and possibility of life on other worlds. **Prerequisite:** Reading - 1 level prior to transfer. **Recommended:** MATH BA with a grade of “C” or better. **Hours:** 54 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE B.1, CSU GE B.1, IGETC 5A.

**AUTOMOTIVE**

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

**AUTO B1ab Introduction to Automotive Technology (2-2 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:** B1a: Reading - 1 level prior to transfer; B1b: AUTO B1a with a grade of C or higher. **Hours:** 27-27 lect. 27-27 lab. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC 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:** 108 lect, 162 lab. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** UC 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 with at least a grade of “C.” Hours: 108 lect, 162 lab. Repeat: 1. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

AUTO B3 Fundamentals of Automotive Management and Services (4 units)
The course covers critical knowledge and skills necessary to prepare traditional and non-traditional students for employment in four positions within the service management operations of automotive dealerships/business and shops. The positions are: 1) Service Writer/Advisor, 2) Parts-Sales and Service (Parts Counter Person), 3) Warranty Specialist and 4) DMV Specialist. Recommended: AUTO B1a and Reading - 1 level prior to transfer. Hours: 54 lect, 54 lab. CCS: Occupational Education. Transferable: CSU and private colleges.

AUTO B14 Auto Tune-Up: Electrical/Ignition/Accessories (11 units)
Prepares student 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 computerized diagnosis of the modern automobile. Recommended: AUTO B1a with a grade of C or higher or one year automotive repair work experience. Reading - 1 level prior to transfer. Hours: 162 lect, 108 lab. Repeat: 2. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

AUTO B15 Auto Tune-Up: Fuel Systems and Emission Controls (11 units)
Theory, operation, and servicing of automotive fuel systems, emission systems and advanced engine performance. Prepares for the ASE A8 exam. Recommended: AUTO B1a with a grade of “C” or better, Reading - 1 level prior to transfer. Hours: 162 lect, 108 lab. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

AUTO B56ab Diesel Engines (2-2 units)
Diesel technology used in agriculture and transportation industries, covers principles of operation, diagnosis and service. Recommended: Reading - 1 level prior to transfer. Hours: 18 lect, 18 lab for each 2 units. CCS: Occupational Education. Not Transferable: Not degree applicable.

AUTO B56c Hydraulics and Fluid Power Systems (2 units)
The application of hydraulic technology used in industrial and agricultural applications for stationary and mobile applications. Covers design, theory of operation and service of fluid power systems. Recommended: Reading - 1 level prior to transfer. Hours: 18 lect, 18 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

AUTO B59 Automotive Air Conditioning (4 units)
Prepares for ASE A7 and T7 exams. Safety, principles and theory of automotive air conditioning systems. Laboratory practice in the service and repair of automotive heating, ventilation and air conditioning components. Recommended: Reading - 1 level prior to transfer. Hours: 54 lect, 54 lab. Offered: F, S. CCS: Occupational Education. Not Transferable: Associate Degree only.

AUTO B61 Basic and Enhanced Area Clean Air Car Course (4 units)
This course prepares the student to take the California State Smog Test. It also helps prepare the student to take the ASE A-6, A-8 & L-1 tests. All of the elements of this class are mandated by the California Department of Consumer Affair’s, Bureau of Automotive Repair, and are subject to periodic change and addition by that agency. Recommended: AUTO B1ab with a grade of C or higher or one year of automotive repair work experience in automotive performance and emissions, Reading - 1 level prior to transfer. Hours: 54 lect, 54 lab. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: formerly AUTO B65ab. Not open to students who have taken the equivalent courses AUTO B65a, AUTO B65b or AUTO B65ab.

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 - 1 level prior to transfer. Hours: 27 lect, 27 lab. Offered: S. CCS: Occupational Education. Not Transferable: Associate Degree only.

AUTO B64 Automotive Electricity and Electronics (4 units)
Fundamentals of automotive electronics and electrical components including ignitions, computers, batteries, alternators, starters. Laboratory emphasis on testing and servicing of electrical equipment. Prepares for ASE A6 exam. Recommended: Reading - 1 level prior to transfer. Hours: 54
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 - 1 level prior to transfer. Hours: 27 lect, 27 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

AUTO B74 Automotive Disc and Drum Brake Service (2 units)

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 with a grade of C or higher or high school automotive class, or one year automotive repair work experience. Hours: 36 lect, 72 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 with a grade of C or better. Hours: 36 lect, 72 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 with a grade of C or better. Hours: 36 lect, 72 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 with a grade of C or better. Hours: 36 lect, 72 lab. Offered: F. Repeat: 1. CCS: Occupational Education. Not Transferable: Associate Degree only.

AUTO B80 Automotive Maintenance and Repair (6 units)
Engine components, chassis, brake, air conditioning service and basic engine tune-up. Hours: 48 lect, 144 lab. CCS: Occupational Education. Not Transferable: Degree only.

AUTO B90 Automotive Maintenance and Repair (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 with a grade of C or better. Hours: 18 lect, 36 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

AUTO B106 Automotive Brakes, Suspension, Steering and Alignment (9 units)
A comprehensive course in automotive and light truck brake, alignment, suspension, and steering systems. Designed to give students the skills and knowledge to diagnose and repair these systems to industry standards. Prerequisite: AUTO B64a or AUTO B15 or AUTO B14 with a grade of C or better. Recommended: Reading - 1 level prior to transfer. Hours: 128 lect, 142 lab. Repeat: 1. CCS: Occupational Education. Not Transferable: Associate Degree only.

AUTO B112 Automotive Transmissions and Gear Boxes (9 units)
Automatic transmissions and transaxles, computer controls, 2, 3, and 4 speed transmissions, overdrive, and all related components. Also covers standard transmissions and transaxles, clutches, “U” joints, differentials and all related components. Successful completion should enable student to pass the National Institute of Service Excellence test. Prerequisite:
AUTO B1a and B1b or B64a or B14 or B15 with a grade of C or better. **Recommended:** Reading - 1 level prior to transfer.  
**Hours:** 128 lect, 142 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**BIOLOGY**

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

**BIOLOGY**

Introduction to environmental science with major consideration given to the processes that sustain human life on this planet. Topics include: the relevance of ecology to human affairs; current biological and physical environmental issues; population ecology; biogeochemical cycles; ecosystems and biodiversity including introduced and endangered species; energy flow through ecosystems; pollution and wastes; global changes; environmental economics and ethics; and potential ecological effects on the future of this planet. **Prerequisite:** MATH BD with a grade of “C” or better. **Hours:** 54 lect, 108 lab. Field trips required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE B.1; CSU GE B.2, B.3; IGETC 5.B.

**BIOL B7 Environmental 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 - 1 level prior to transfer. **Hours:** 54 lect, 54 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. BC GE B.1; CSU GE B.2, B.3; IGETC 5.B. **Note:** formerly BIOL B7 and BIOL B7L.

**BIOL B11 Concepts of Biology (4 units)**

This is the first part of a two-semester integrated anatomy and physiology course providing the necessary foundation required for BIOL B33. The course covers the principles of human anatomy and physiology, emphasizing the integration of structure, function, and maintenance of homeostasis.

**BIOL B16 General Microbiology (5 units)**

Introduction to the study of microorganisms including: survey of microorganisms, history of microbiology, microbial control through physical and chemical agents, bacterial genetics and biogenetic engineering, bacterial metabolism, bacterial, fungal, protozoal, helminth, and viral diseases by transmission. In addition, immunology, public health epidemiology, nosocomial infections, and microbial applications to food, water and sewage treatment are discussed. **Prerequisite:** Any college level chemistry and any college level biology course with a grade of “C” or better. Reading - 1 level prior to transfer. **Hours:** 54 lect, 108 lab. Field trips required. **Offered:** F, S. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. BC GE B.1; CSU GE B.2, B.3; IGETC 5.B.

**BIOL B18 Essentials of Human Anatomy and Physiology (4 units)**

An integrated life science course specifically targeted for students in allied health programs. Topics include microscopic and gross anatomy as well as physiology of all human organ systems: skeletal, musculature, cardiovascular, lymphatic/immune, respiratory, digestive, excretory, nervous, endocrine, reproductive and integumentary. Additional topics will address cell structure and function, human development and human heredity. **Prerequisite:** Reading - 1 level prior to transfer. **Hours:** 54 lect, 54 lab. **Offered:** F, S. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges. BC GE B.1; CSU GE B.2, B.3.

**BIOL B20 Human Biology (4 units)**

Individually directed work in the biology laboratory. Students will learn biological preparation, and/or development of teaching materials while assisting in a biology laboratory. **Prerequisites:** Any college biology course with a grade of C or better, Reading - 1 level prior to transfer. **Hours:** 27 lab for each one-half unit. **Repeat:** 3 or until a limit of 4 units is reached. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges.

**BIOL B21 Special Projects in Biology (0.5-2 units. Limit 4 units)**

A non-majors introductory course that 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 - 1 level prior to transfer. **Hours:** 54 lect, 54 lab. Field trips may be required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE B.1; CSU GE B.2, B.3; IGETC 5.B.

**BIOL B22 Special Projects in Biology (0.5-2 units. Limit 4 units)**

A non-majors introductory course that 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 - 1 level prior to transfer. **Hours:** 54 lect, 54 lab. Field trips may be required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE B.1; CSU GE B.2, B.3; IGETC 5.B.

**BIOL B3a General Biology I (5 units)**

Introductory course for students majoring in the biological sciences or pursuing pre-professional programs of study such as pre-medical, pre-pharmacy, pre-dentistry. Emphasizes scientific processes and methods of biology including original research. Explores unifying principles of micro- and macro-evolutionary processes, biodiversity of organisms, systems, principles of ecology, animal behavior and plant biology. **Prerequisite:** CHEM B1a with a grade of “C” or better. **Reading:** Reading - 1 level prior to transfer. **Hours:** 54 lect, 108 lab. Field trips required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE B.1; CSU GE B.2, B.3; IGETC 5.B.

**BIOL B3b General Biology II (5 units)**

Principles of cell biology, molecular biology, metabolism, biochemistry, molecular genetics, and physiology. **Prerequisite:** CHEM B1a with a grade of “C” or better. **Reading:** Reading - 1 level prior to transfer. **Hours:** 54 lect, 108 lab. Field trips required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. CSU GE B.2, B.3; IGETC 5.B.

**BIOL B32 Human Anatomy and Physiology I (4 units)**

This is the first part of a two-semester integrated anatomy and physiology course providing the necessary foundation required for BIOL B33. The course covers the principles of human anatomy and physiology, emphasizing the integration of structure, function, and maintenance of homeostasis.
Topics are anatomical terminology, body chemistry, histology, articulations, and the following systems: integumentary, skeletal, muscular, central and peripheral nervous, and special senses. Both BIOL B32 and B33 must be taken to study all the major body systems. This series meets the diverse needs of students seeking careers in such allied health fields as nursing, pharmacy, and physician’s assistant. **Prerequisite:** Reading - 1 level prior to transfer. **Hours:** 54 lect, 54 lab. **Offered:** F, S. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. BC GE B.1; CSU B.2, B.3; IGETC 5.B. **Note:** Replaces both BIOL B14, Anatomy and BIOL B15, Physiology.

**BIOL B33 Human Anatomy and Physiology II (4 units)**
This is the second part of a two-semester integrated anatomy and physiology course that covers the principles of human anatomy and physiology, emphasizing the integration of structure, function, and maintenance of homeostasis. Topics include the following systems: nervous (CNS), endocrine, cardiovascular, lymphatic/immune, respiratory, digestive, urinary and reproductive. Both BIOL B32 and BIOL B33 must be taken to study all the major body systems. This series meets the diverse needs of students seeking careers in such allied health fields as nursing, pharmacy, and physician’s assistant. **Prerequisite:** BIOL B32 with a grade of “C” or better; Reading - 1 level prior to transfer. **Hours:** 54 lect, 54 lab. **Offered:** F, S. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. BC GE B.1; CSU B.2, B.3; IGETC 5.B. **Note:** Replaces both BIOL B14, Anatomy and BIOL B15, Physiology.

**BIOL B34 Pathophysiology (3 units)**
The study of the basic principles and processes of disease within the human body using background information from anatomy, physiology, and chemistry. Topics include basic disease mechanisms as well as the etiology and pathogenesis of disorders by body system. Diagnostic procedures, preventative measures, and examples of current therapeutic practices are also explored. **Prerequisite:** BIOL B32 and BIOL B33 with a grade of C or better or the older BIOL B14, Anatomy and BIOL B15, Physiology series. **Hours:** 54 lect. **Offered:** F, S. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges.

**BIOL B255 Human Anatomy and Physiology Success Lab (0.5 -1 unit)**
An on-campus supplemental laboratory designed for self-paced practice and mastery of anatomy and physiology skills. Provides instructional guidance and access to laboratory models and equipment to assist students to refine skills and complete learning outcomes required in courses studying human anatomy and physiology. Multimedia and computer assisted instructional materials which support the semester learning objectives are available. Subsequent enrollment in additional semesters will offer the student an opportunity for additional skill and competency development within the subject matter. **Prerequisite:** Concurrent enrollment in target courses BIOL B32, B33, B18 or B20. Offered Pass/No Pass grading only. **Hours:** 9-18 lab. Open entry/open exit. **Repeat:** 3. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Associate Degree only.

**BUSINESS ADMINISTRATION**
Credit limitations may apply. For specific information, see a counselor or the transfer institution.

**BSAD B1 Financial Accounting (4 units)**
An introduction to the theory and practice of accounting and financial reporting. Topics include the accounting cycle, financial statements and accounting for assets, liabilities, equities, revenues and expenses. **Prerequisite:** Math BD with a grade of C or better and Reading - 1 level prior to transfer. **Hours:** 72 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

**BSAD B2 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 B1 with a grade of C or better. **Hours:** 72 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges.

**BSAD B5 Human Relations/People Skills (3 units)**
A behavioral approach to the business environment including self-understanding, motivation techniques as related to the workplace, morale, discrimination, and developing leadership techniques for success. Provides insight on the effects of drugs and alcoholism on the individual and work group. Emphasizes career selection and communication skill building. **Recommended:** English level 5 and Reading - 1 level prior to transfer. **Hours:** 54 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Elective credit only. BC GE D.1.

**BSAD B9 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 - 1 level prior to transfer. **Hours:** 54 lect/disc. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

**BSAD B18 Business Law (3 units)**
BUSINESS ADMINISTRATION

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 B18 to match CSUB’s ACC 275. Recommended: Reading - 1 level prior to transfer. Hours: 18 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. Recommended: English Level 5 and Reading - 1 level prior to transfer. Hours: 54 lect. CCS: Occupational Education. Transferable: UC, CSU and private colleges. BC GE D.2

BSAD 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 licenses. Recommended: Reading - 1 level prior to transfer. Hours: 54 lect. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges.

BSAD 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. Recommended: MATH BA with a grade of C or higher, English Level 5, Reading - 1 level prior to transfer. Hours: 54 lect. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges. BC GE D.2

BSAD 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: English Level 5 and Reading - 1 level prior to transfer. Hours: 54 lect/disc. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges.

BSAD B45 Business Administration (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 - 1 level prior to transfer. Hours: 54 lect. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges.

BSAD 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 - 1 level prior to transfer. Hours: 54 lect. Offered: F. CCS: Occupational Education. Not Transferable: Associate Degree only.

BSAD 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 - 1 level prior to transfer. Hours: 54 lect. Offered: F. CCS: Occupational Education. Not Transferable: Associate Degree only.

BSAD 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: BSAD B53a with a grade of C or better. Hours: 54 lect. Offered: S. CCS: Occupational Education. Not Transferable: Associate Degree only.

BSAD B54 Payroll Accounting (3 units)

BSAD B55 Computer Accounting Applications (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: BSAD B53a/b or BSAD B1 with a grade of C or better. Hours: 54 lect. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges.
BSAD B57 Federal and California Income Taxation (4 units)
Instruction in Federal and California Income Tax law, theory and practice. Incorporates the H & R Block curriculum for registration as a tax preparer. **Hours:** 72 lect. **Offered:** F. **Repeat:** 2. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BSAD B61 Human Resources Management (3 units)
A comprehensive study and review of human resources management. The course focus is on strategic planning, the nature and function of hiring, recruitment, training, development and retention of employees and staff. Topics include performance appraisals, compensation, motivation, retraining, disciplinary action, labor relations, and contract negotiations. The course also emphasizes Federal, State and local laws as they apply to employers and employees in both the public and private sector. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BSAD B65 Principles of Organizational Communication (3 units)
Examination of written and oral communication in the business world. Examines the processes of human behavior and communication within the organizational context. It will test the principles of English writing skills and communication in the business office and focus on writing letters, memorandums, e-mails, resumes, reports and oral presentations. Course defines the barriers to effective communication and teaches the appropriate techniques to overcome poor communication skills. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect/disc. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BSAD B70a Salesperson/Broker Prelicense (1 unit)
Intended for prospective salespersons and brokers who are preparing for real estate examinations. Covers basic principles and contains review questions to prepare students for all aspects of California Real Estate Examination. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 18 lect. **Repeat:** 3. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BSAD B71 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 the 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. Satisfies partial educational requirement of state sales and broker’s licenses. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect/disc. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BSAD B72 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 - 1 level prior to transfer. **Hours:** 54 lect. **Field trips required.** **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BSAD B73 Common Interest Developments (CID) (3 units)
Intended as a guide for condominium and homeowner’s associations, board of directors and property owners regarding issues that arise in the context of community or homeowner association living. Satisfies partial educational requirements for sales and brokers licenses. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BSAD B74 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:** Reading - 1 level prior to transfer. **Hours:** 54 lect/disc. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BSAD B75 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:** BSAD B39 with a grade of C or higher. **Hours:** 54 lect/disc. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BSAD B76 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:** BSAD B39 with a grade of C or higher. **Hours:** 54 lect/disc. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

BSAD B77 Basic Appraisal Principles (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:** BSAD B39 with a grade of C or higher. **Hours:** 54 lect/disc. **Repeat:** 1. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**BSAD B78 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 - 1 level prior to transfer, real estate license or BSAD B39 with a grade of C or higher. **Hours:** 54 lect. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**BSAD B79 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:** BSAD B53a with a grade of C or higher. **Hours:** 54 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**BSAD B80 Basic Appraisal Procedures (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:** BSAD B77 with a grade of C or better. **Hours:** 54 lect. **Field trips required.** **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**BSAD B81 Residential Sales Comparisons and Income Approaches (3 units)**

This practical, hands-on course reviews residential appraisal techniques and using a case study, demonstrates the skills needed by modern residential appraisers. The course takes participants through a residential appraisal from the time the assignment is received to the point at which a value conclusion is reached and the appraiser is ready to complete the appraisal report. The case study is supplemented with problems focusing on individual valuation procedures. **Prerequisite:** BSAD B77 or B80 with a grade of C or better. **Hours:** 54 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**BSAD B82 Real Estate Office Administration (3 units)**

Assists the Real Estate professional in the planning, managing, organizing, staffing and marketing of a Real Estate Office as well as covering Department of Real Estate Requirements. Satisfies partial educational requirements for the sales and broker licenses. **Recommended:** BSAD B39 with a grade of C or higher. **Hours:** 54 lect./disc. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**BSAD B85 Business English (3 units)**

Basic English grammar course focusing on nouns, pronouns, verbs, adjectives, adverbs, conjunctions, and prepositions. Also includes standard punctuation, capitalization, number usage, and vocabulary development. **Hours:** 54 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent course, BSAD B285.

**BSAD B88 Office Procedures (3 units)**

A finishing course for those completing their training in office assisting. Focuses on the technologies currently taking place in the office environment and is designed to develop knowledge and skills necessary for success in the work place. Topics such as job attitudes, communications, human relations, and time and stress management are featured. Also included are telephone techniques, processing mail, travel arrangements, appointment scheduling, arranging meetings, the job application process, and interviewing techniques. **Hours:** 54 lect/disc. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**BSAD B90 Fundamentals of Retailing (3 units)**

Principles and practices used in management of retail businesses. Includes site selection, layout, organization, staffing, positioning, customer service, promotional techniques, and all aspects of the critical buying function. **Recommended:** English Level 5, Reading - 1 level prior to transfer, MATH BA with a grade of C or higher. **Hours:** 54 lect/disc. **Field trip required.** **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**BSAD B91 E-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 - 1 level prior to transfer. **Hours:** 18 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**BSAD B250 Quick Computer Keyboarding for Survival (1 unit)**

Students learn the basic techniques of the touch system in the mastery of the alpha/numeric keyboard and develop speed and accuracy in keying data. **Hours:** 30 hours individualized instruction and supervised lab. Open entry/open exit. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken BSAD B252a.

**BSAD B252abc Computer Keyboarding, Parts 1, 2, and 3 (1-1-1 unit)**

Students learn the basic techniques of the touch system in the mastery of the alpha/numeric keyboard and develop speed and
accuracy in keying data. They also develop the basic formatting skills necessary to produce letters, memorandums, reports, and tables. This is a basic course in the Office Technology curriculum and is a life-long learning skill. **Prerequisite:** BSAD B252a none; BSAD B252b: BSAD B252a with a grade of C or equivalent; BSAD B252c: BSAD B252b with a grade of C or equivalent. **Hours:** 30 lab hours per unit with individualized instruction in a supervised lab. Open entry/open exit. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. BSAD B252a is not open to students who have taken BSAD B250.

**BSAD B253abc Document Processing Parts 1-2-3 (1-1-1 unit)**

Further develops keyboarding speed, accuracy, and production rates on letters, reports, tables, forms, rough drafts, newsletters, and other documents using Microsoft Word applications. Emphasis is on producing usable copy for employment purposes and increasing keyboarding skill levels. **Prerequisites:** BSAD B253a: BSAD B252c with a grade of “C;” BSAD B253b: BSAD B253a with a grade of “C.” BSAD B253c: BSAD B253b with a grade of “C.” **Hours:** 30 hours per unit with individualized instruction in a supervised lab. Open entry/open exit. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**BSAD B264 Ten-Key Proficiency (0.5 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. **Hours:** 24 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**BSAD B280 Machine Transcription (1.5 units)**

Students learn the skill of operating transcribing machines and develop skill in keying documents while listening to dictated material. Practice in transcribing letters, memoraund, and other business correspondence is stressed. Emphasizes English usage, punctuation, spelling/word usage, and proper document formatting when transcribing data. **Prerequisites:** BSAD B252c with a grade of C or equivalent and BSAD B85 or B285 or equivalent. **Hours:** 30 hours individualized instruction in a supervised lab. Open entry/open exit. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**BSAD B285 Business English (3 units)**

Basic English grammar course focusing on nouns, pronouns, verbs, adjectives, adverbs, conjunctions, and prepositions. Also includes standard punctuation, capitalization, number usage, and vocabulary development. **Hours:** 54 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Hours:** 54 individualized instruction and supervised lab. Open entry/open exit. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Note:** Not open to students who have taken the equivalent course, BSAD B85.

**BSAD B287 Filing (1.5 units)**

Training in principles of filing and records management according to the Associate of Records Managers and Administrators (ARMA). Study and practice in filing by alphabetic, numeric, geographic, and subject methods. **Hours:** 32 hours individualized instruction and supervised lab. Open entry/open exit. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**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 to a more complete understanding of that field.

**CHEM B1a General Chemistry I (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 - 1 level prior to transfer; 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 should be completed within 2 years of the course to enable success. **Hours:** 54 lect, 108 lab. **Offered:** F.S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE B.1; CSU GE B.1, B.3; IGETC 5.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. **Recommended:** Chem prerequisite accomplished within two years prior to taking this class. **Hours:** 54 lect, 108 lab. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

**CHEM B2a Introductory General Chemistry (4 units)**

The principles and applications of general college chemistry. Designed for liberal arts, physical education and some baccalaureate nursing majors. Recommended also for students who need additional background for the more intensive
course, CHEM B1a. **Prerequisite:** MATH BA with a grade of “C” or equivalent and Reading - 1 level prior to transfer. **Recommended:** Math prerequisite accomplished within previous 2 years. **Hours:** 54 lect, 54 lab. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students with credit in CHEM B1a. BC GE B.1; CSU GE B.1, B.3; IGETC 5.A.

**CHEM B11 Introduction to General, Organic and Biochemistry (5 units)**
An introduction to general, organic, and biochemistry using a qualitative and quantitative approach. Topics include physical principles of chemistry; inorganic compounds and reactions; a survey of organic chemistry-classification, compounds, reactions, nomenclature; biochemistry-classification, compositions, reactions in living organisms. **Prerequisite:** MATH BA with a grade of “C” or better. Reading - 1 level prior to transfer. **Hours:** 54 lect, 108 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. BC GE B.1; CSU GE B.1, B.3; IGETC 5.A.

**CHEM B18 Elementary Organic Chemistry (5 units)**
Introduction to and study of the chemistry of organic compounds: the functional groups, representative types of, and theory behind, organic reactions, and the biological classes of proteins, fats, carbohydrates, and nucleic acids. It will prepare students well for further study in organic chemistry and serve those interested in the sciences and related fields, including ones requiring a semester of organic chemistry for transfer/entrance. The laboratory covers fundamental techniques including separations, synthesis, identification, and instrumental analysis. **Prerequisites:** CHEM B1a with a grade of “C” or higher, or CHEM B2a with a grade of “B” or higher or evaluation by instructor of student’s chemistry skills and knowledge. **Hours:** 54 lect, 108 lab. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. CSU GE B.1, B.3; IGETC 5.A.

**CHICANO STUDIES**

**CHST B20ma Mariachi Ensemble (1 unit)**
Practical experience in Mariachi Ensemble. **Hours:** 54 lab. Field trips may be required. **Repeat:** 3. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Elective credit only. Not open to students who have taken the equivalent course, MUSC B20ma.

**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. Partially satisfies the requirements in U.S. Constitution, American history and institutions. Course is cross listed under History (HIST B30a). **Recommended:** Reading - 1 Level prior to transfer. **Hours:** 54 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, HIST B30a. BC GE D.2; CSU GE D.3, D.6; IGETC 3.B, 4.

**CHST B30b History of Chicanos in the Southwest (3 units)**
Survey of the Chicanos and the United States with an emphasis on the developments in California and the Southwest from 1848 to the present: relationship of regions within the U.S. area, roles of major ethnic groups, continuity of American experience, derivation from other cultures, aftermath of the U.S. Mexican War, interrelationship of Mexican and U.S. history between 1860 and 1910; effects of Mexican Revolution on the 20th century experience of Chicanos, California State Constitution. Partially satisfies the requirements in U.S. Constitution, American history and institutions. **Recommended:** Eligibility for English B50 and Reading - 1 Level prior to transfer. **Hours:** 54 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, HIST B30b. BC GE D.3; CSU GE D.3, D.6; IGETC 3.B, 4.

**CHST B30e Art of Latin America (3 units)**
This course is a historical survey of the arts in Latin America. The focus is on the Spanish-speaking regions of the Americas, as well as Cuba and the Dominican Republic. Students examine artistic contributions by Latin American artists to colonial and modern art forms. **Recommended:** Eligibility for ENGL B50 and Reading - 1 level prior to transfer. **Hours:** 54 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, ART B30e. BC GE C; CSU GE C.1; IGETC 3.A.

**CHST 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 and Portuguese colonial systems 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 B50 and Reading - 1 level prior to transfer. **Hours:** 54 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, HIST B33. BC GE D.2, D.3; CSU GE D.3, D.6; IGETC 3.B, 4.

**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 - 1 level prior to transfer. , English Level 5. **Hours:** 54 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, SOCI B36. BC GE D.2; CSU GE D.3, D.0; IGETC 4.
CHDV B32 Teaching in a Diverse Society (3 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. **Prerequisite:** Reading - 1 level prior to transfer. **Hours:** 54 lect. **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 - 1 level prior to transfer. **Hours:** 54 lect. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only. (DSS 3)

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 - 1 level prior to transfer. **Hours:** 54 lect. **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 - 1 level prior to transfer. **Hours:** 54 lect/demo. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. (DSS 3)

CHDV B41 Supervised Field Experience in Early Childhood Education (4 units)
Basic techniques of working with children including promoting self-esteem; creativity; self-discipline; development of physical and cognitive skills; and planning appropriate curriculum. The lab portion of this course includes supervised field experience working with children two to five years in age in a Child Development Center applying knowledge gained in lecture. Field trips may be required. **Prerequisite:** Reading - 1 level prior to transfer. **Hours:** 36 lect, 108 lab. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** This

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**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 - 1 level prior to transfer. **Hours:** 54 lect/disc. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only. (DSS 4)

**CHDV B20 Principles and Practices (3 units)**
An examination of the underlying theoretical principles of developmentally appropriate practices applied to programs and environments. Emphasis is on the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative and intellectual development for all children. This course includes a review of the historical roots of early childhood programs and the evolution of the professional practices promoting advocacy, ethics and professional identity. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges. (DSS 1,3)

**CHDV B21 Child Growth and Development: Birth Through Adolescence (3 units)**
The interdisciplinary study of physical, social, emotional, and cognitive and language development from conception through adolescence for both typical and atypical children. The family and broader cultural environments provide the context for the study. Topics include historical views of children, developmental theories, research methodology, and patterns of growth. **Recommended:** CHDV B20, Reading - 1 level prior to transfer. **Hours:** 54 lect. **CCS:** Occupational Education. **Transferable:** UC, CSU, and private colleges. **Recommendations:** BC GE D.1; CSU GE D.7, E; IGETC 4.

**CHDV B22 Observation and Assessment - Birth Through Adolescence (3 units)**
Course includes acquisition and application of basic observation skills regarding children’s physical, cognitive, language, social and emotional development from birth to adolescence. **Prerequisite:** CHDV B21 with a grade of “C” or better, Reading - 1 level prior to transfer. **Hours:** 54 lect. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

**Note:** At the end of some course descriptions refers to California Department of Social Services categories under Title 22.
course combines the previous CHDV B41 and B41L (formerly CHDV B41a or CHDV B41b plus CHDV B41aL or CHDV B41bL).

**CHDV B42 Child, Family and Community (3 units)**
Course includes the study of the socialization of children in developmental, family and community contexts, with an emphasis on historical and socio-cultural factors. In addition, identity development will be highlighted, showing the importance of respectful, reciprocal relationships that support and empower families. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect. Field trips may be required. **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 - 1 level prior to transfer. **Hours:** 54 lect. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges. Note: Elective credit only.

**CHDV B44 Infant/Toddler Care and Development with Supervised Field Experience (3 units)**
Infant/toddler development - physical, emotional, social and intellectual. Principles of child care, nutrition, health practices, and curriculum for children ages birth through two years. Supervised field experience in an infant/toddler center. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 18 lect, 108 lab. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only. CHDV B44L has been combined with CHDV B44.

**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.” Reading - 1 level prior to transfer. **Offered:** F, S, SS. **Hours:** 54 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.” Reading - 1 level prior to transfer. **Hours:** 54 lect. Field trips required. **Offered:** F, S, SS. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only. (DSS 6)

**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 - 1 level prior to transfer. **Hours:** 54 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 - 1 level prior to transfer. **Hours:** 54 lect, 18 observation by arrangement. Field trips required. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

**CHDV B49 Child Health, Safety and Nutrition (3 units)**
Introduction to the laws, regulations, standards, policies and procedures and early childhood curriculum related to child health safety and nutrition. The key components that ensure physical health, mental health and safety for both children and staff will be identified along with the importance of collaboration with families and health professionals. Focus on integrating the concepts into every day planning and program development for all children. Pediatric CPR and First Aid certification are 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 - 1 level prior to transfer. **Hours:** 54 lect. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only. (DSS 7)

**CHDV B50 Creative Use of Literature and Puppetry with Young Children (3 units)**
Exposes student to creative use of literature and puppetry to be used with preschool aged children. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. Note: This course replaces CHDV B57, CHDV B70K and CHDV B70C.

**CHDV B52 Care of Infants and Toddlers with Disabilities (3 units)**
Interdisciplinary course designed to prepare child care workers and educational aides to care for disabled and chronically ill infants and toddlers. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect. Field trips required. **Offered:** F,S, SS. **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 - 1 level prior to transfer. **Hours:** 36 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. (DSS 6)

**CHDV B71m Foster and Kinship Care Education (0.5 -1 unit)**
Various topics that satisfy training mandated by the Kern County Department for foster parents and kinship givers. **Hours:** 9 lect for each 0.5 unit. **Offered:** F, S. **Repeat:** Unlimited. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

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

**COMM B1 Public Speaking (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:** Reading and Writing - 1 level prior to transfer. **Hours:** 54 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **BC GE A.1; CU GE A.1; IGETC 1.C; C-ID COMM 110.**

**COMM B2 Interpersonal Communication (3 units)**
Introduction to all aspects of the communication process including intrapersonal, interpersonal, and group communication, as well as speaking in public. Emphasizes an understanding of communication in everyday life in conjunction with a knowledge of how to present ideas, thoughts and feelings. Introduction to various theories of interpersonal communication; participation in experiences designed to enhance competence and develop skills in interpersonal relationships. **Recommended:** Reading and Writing - 1 level prior to transfer. **Hours:** 54 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **BC GE A.1; CU GE A.1; IGETC 1.C.**

**COMM B4 Persuasive Communication (3 units)**
Principles and practices of persuasion in various communication settings. Prepare and deliver persuasive speeches for specific audiences. **Recommended:** Reading and Writing - 1 level prior to transfer. **Hours:** 54 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **BC GE A.1; CU GE A.1.**

**COMM B5 Rhetoric and Argumentation (3 units)**
Theoretical and practical aspects of argumentation and public debating to develop students’ critical thinking abilities. Emphasis is on composition, presentation, and evaluation of speeches in argumentative, debate, and advocacy contexts. Identification of public issues, research and organization of evidence, building sound and effective arguments, and facility with debate formats are the primary learning outcomes of this course. Introduces logical reasoning and builds competence with formal reasoning before applying those to argumentation and debate about public issues. **Recommended:** Reading and Writing - 1 level prior to transfer. **Hours:** 54 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **BC GE B.2; CU GE A.3; C-ID COMM 120.**
COMM B6 Intercultural Communication (3 units)
Study of basic theory and skills of intercultural communication.
Emphasis is given to communicating effectively in diverse social and professional environments. Focus will also be given to the analysis and comparisons of message perception and transmission in interactions between people from different cultures. Practical application of these skills will also be highlighted. Recommended: Reading and Writing - 1 level prior to transfer. Hours: 54 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges. BC GE D.1; CSU GE D.3, D.7; IGETC 4.

COMM B7 Organizational Communication (3 units)
Course concentrates on a global look at communication in an organizational setting: theory and practice of communication in private and public organizations, interpersonal and group communication patterns within organizations, systems of ethical internal and external communication, leadership in the organization, organizational culture's impact on communication, and the role of communication in achieving organizational goals. Course includes team projects that will require work outside of class and visits to a community location of your team's choosing. Recommended: Reading and Writing - 1 level prior to transfer. Hours: 54 lect. CCS: Liberal Arts and Sciences. Transferable: CSU and private colleges. BC GE D.2; CSU GE D.7.

COMM B8 Small Group Communication (3 units)
This oral communication class examines small group processes such as group formation and development, conflict, problem solving, and group climate. Covers an understanding of diversity, leadership roles, and theory. Students participate in class groups where experiential learning and presentations are part of the class experience. Small group meetings outside of class time are required. Field trips may be required. Recommended: Reading and Writing - 1 level prior to transfer. Hours: 54 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges. BC GE A.1; CSU GE A.1; IGETC 1.C; C-ID COMM 140.

COMM B9 Health Communication (3 units)
Course introduces student to the theory and practice of health communication in dyadic, small group, organizational, and mass media contexts. Students examine topics such as provider-client communication, the influence of diversity and culture on health communication, and the role that the mass media plays in disseminating health information. Selected topics and theories of human communication are directly applied to communication situations in health care settings through the use of case studies. Emphasis is on understanding and improving health communication among health professionals, between health professionals and clients, and with the general public. Recommended: Reading and Writings - 1 level prior to transfer. Hours: 54 lect. Offered: F, S. CCS: Liberal Arts and Sciences. Transferable: CSU and private colleges.

COMM B10 Leadership and Communication (3 units)
Course presents theories of communication, leadership and followership as they explore the essential role communication plays in leadership at all levels. Course emphasizes the study of communication skills that are central to performing successfully as a leader in a variety of contexts including organizational, familial, team and public settings. Specific attention is given to self-assessment of leadership and communication skills, self-reflection, and creation of a personal leadership communication plan. Recommended: Reading and Writing - 1 level prior to transfer. Hours: 54 lect. Offered: S. CCS: Liberal Arts and Sciences. Transferable: CSU and private colleges. Note: Elective credit only. Not open to students who have taken COMM B49b or COMM B49.

COMM B21 Oral Interpretation (3 units)
Study of the theoretical and technical aspects involved in the selection, analysis, interpretation and oral performance of various forms of literature including poetry, prose, and drama (plays, scripts and screenplays). Includes participation in various types of performance exercises including presentation of prose, poetry, drama and group ensemble. Recommended: Reading and Writing - 1 level prior to transfer. Hours: 54 lect. CCS: Liberal Arts and Sciences. Transferable: CSU and private colleges. BC GE C.

COMM B27 Intercollegiate Speech Competition Preparation (1-2 units)

COMM 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 - 1 level prior to transfer. Hours: 27 lab for each 0.5 unit. Field trip required. Repeat: 3. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: CSU and private colleges.

COMM B49a Communication Ambassadors (3 units)
This course allows students to apply a variety of skills learned in other Communication classes. Students will participate in a variety of practical projects including: public speaking, leadership, project management, event planning, administration of programs, database management, speaking to members of the community and high schools and research projects. The goal of this class is to strengthen communication skills and
broaden students’ understanding of the discipline. **Prerequisite:** COMM B1 or COMM B2 or COMM B4 or COMM B5 or COMM B6 or COMM B7 or COMM B8 with a grade of C or better, or evaluation by instructor of student’s public speaking, interpersonal, and group skills. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54. **Repeat:** 3. **CS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges.

**COMM B49c Political Communication: The Presidential Election (3 units)**

This course examines theories and practices of political communication during presidential elections. Students will focus on methods that candidates, parties, and stakeholders use to communicate political messages. Students will examine the use of both traditional media and emerging technologies in contemporaneous political campaigns. Students will also analyze and critique candidate speeches and debate performances. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54. **CS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges. Note: Elective credit only.

**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, the sciences and other disciplines. Includes the history of computing, computer hardware, operating systems, computer networking and communication systems, the Internet, and ethical and societal implications of computer usage. An overview of personal computer applications software (word processing, spreadsheets, and personal database management systems) is also included. **Recommended:** Minimum one year of high school algebra or MATH BA with a grade of C or higher and Reading - 1 level prior to transfer. **Hours:** 54. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges. Not open to students who have taken COMS B3.

**COMS B3 Computer Concepts and Survival Skills (3 units)**

An introduction to computers and computer information systems as problem-solving and personal productivity tools. The focus of the course is to provide “survival skills” and computer literacy that most computer users need today. The lecture portion includes a brief history of computing, computer hardware and software, communications, the internet, and ethical and societal implications of computer use. The lab portion provides hands-on experience with software and techniques that will help students to be productive personally and professionally. Examples include: word processing, spreadsheets, backup, anti-virus, anti-spyware, communications, multimedia, Email, web-based research, and operating systems. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 27. **Repeat:** 3. **CS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges. Not open to students who have taken COMS B2.

**COMS B5 Introduction to Microsoft Office 2010 (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, electronic presentations, and the necessary operating system fundamentals to use the listed application software. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

**COMS B10 Structured Program Design using Python (2 units)**

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 - 1 level prior to transfer. **Hours:** 36. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** 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 BA with a grade of C or better or one year of high school algebra or equivalent or evaluation by instructor of the student’s math skills. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** UC, 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. **Recommended:** COMS B2 with a grade of C or higher, Reading - 1 level prior to transfer. **Hours:** 54. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

**COMS B25 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 such as COMS B11, or B12, or B14, or B16, or ENGR B19f or B19c with a grade of C or better.
COMS B27 Introduction to Assembly Language (3 units)
Fundamentals of assembly language programming. Topics include binary, decimal 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, linkers, object-oriented 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: At least one course in high level computer programming language with a grade of C or better. Recommended: Reading - 1 level prior to transfer. Hours: 54 lect. Offered: S. CCS: Occupational Education. Transferable: UC, CSU and private colleges.

COMS B32 Programming with Visual Basic (3 units)
Designed as an intermediate-level programming class. Students are introduced to an object-oriented, data-driven language. Explores the Visual Basic programming language to create real-world applications. Topics include: OOP concepts; Visual Basic NET IDE; graphical interfaces (GUI); structured programming concepts; file processing; debugging; designing; building, and accessing ADO databases; classes and objects. Recommended: A high-level programming language. Hours: 54 lect. Offered: F, S. CCS: Occupational Education. Transferable: UC, CSU and private colleges.

COMS B34 SQL and Database Systems Design (3 units)
Course emphasizes “best practices” for relational database design (modeling) and the use of Structured Query Language (SQL) for database manipulation. Normalization, data diagramming, concurrency and other key database concepts will be discussed. The use of Microsoft Access, MySQL, Microsoft SQL Server, and other database management systems will be used to demonstrate concepts. Upon successful completion of this course, students will be able to design real world databases and manipulate them using SQL. Recommended: At least one programming language or application that uses formatted data files (COMS B5, B12, B14, B16, B25, B32, B36, B68a with a grade of C or better. Hours: 54 lect. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

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 kernal 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 with a grade of C or better or evaluation by instructor of student’s knowledge of the C programming language. Hours: 54 lect. Offered: S. CCS: Occupational Education. Transferable: UC, 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: COMS B2 or COMS B5 with a grade of C or higher, or evaluation by the instructor of student’s knowledge of computer information systems and software applications. Hours: 54 lect. 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 lect for each 0.25 unit. Repeat: 3. CCS: Occupational Education. Transferable: CSU and private colleges.

COMS B41 CompTIA Linux+ (3 units)
A general introduction to Linux Installation and Administration. Covers the essentials of installing, configuring, maintaining, administering and troubleshooting the Linux Operating System. Preparation for Exams 1 and 2 of the Sair Linux and GNU certification, and Level One exam of Linux Professional Institute Certification. Recommended: Reading - 1 level prior to transfer. Hours: 54 lect, 54 lab by arrangement. CCS: Occupational Education. Transferable: CSU and private colleges.

COMS B51 Assistive Technologies and the Internet (2 units)
Students will actively engage in assessment, identification, and development of effective computing techniques using standard and assistive technology. Identify and develop individual learning preferences and strategies (visual/verbal, etc.), evaluate computer input and output options for increased usability, and improve access through specialized Text-to-Speech software applications. Students will also learn to use basic tools and features in Internet Explorer to conduct searches, identify credible information, locate academic and general information, and use a variety of online resources to complete a research project. Recommended: Reading Level 4. Hours: 36 lect/disc. Offered: F, S. Repeat: 3. CCS: Precollegiate - basic skills. Not Transferable: Not Degree Applicable.
COMS B52a Introduction to the Microcomputer and Windows (1.5 units)
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. Students will learn the use of the mouse, the desktop, how to work with files, how to work with printers and fonts, use Windows Explorer, use Accessories, how to customize and enhance the performance of the operating system, how to search for files, and have a brief introduction to the Internet. **Hours:** 27 lect. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B53 Intermediate Microcomputer Applications Using Microsoft Office (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 with a grade of C or better or evaluation by instructor of student’s Word, Excel, Access, PowerPoint, and operating system skills. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect, 27 lab by arrangement. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B54 Introduction to OpenOffice (1.5 units)
Introduction to a free Open Source OpenOffice software application suite. Covers basic word processing, spreadsheets, presentation, and database applications in OpenOffice. **Recommended:** COMS B52a, COMS B5 with a grade of C or higher. **Hours:** 27 lect. **Repeat:** 3. **Offered:** C or better or evaluation by instructor of student’s ability to navigate the Internet. **CCS:** Associate Degree only. **Not Transferable:** Not Degree Applicable.

COMS B57a Introduction to Microsoft Office Word 2007 (1.5 units)
Use of the Microsoft Word for Windows word processing application. Word Processing features such as creating, saving, editing and retrieving documents will be covered. Also included will be formatting, merging, sorting, and macros. **Hours:** 27 lect. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Not Degree Applicable.

COMS B61 E-Commerce (1 unit)
Introduces students to E-commerce basics. Emphasis is placed on exploring marketing issues, payment processing, collections, security, and customer service. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 18 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only. **Not Open to:** students who have taken the equivalent course, BSAD B91.

COMS B62a Introduction to Microsoft Office Excel 2007 (1.5 units)
Introduces students to the use of electronic spreadsheets. Covers the application interface, setting up a spreadsheet, formatting, formulas, functions, charts, workbooks, with multiple spreadsheets, web interaction, decision-making, and sorting and extracting data. **Recommended:** COMS B52a with a grade of C or higher or evaluation by instructor of student’s ability to use a microcomputer. **Hours:** 27 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B68a Introduction to Microsoft Office Access 2007 (1.5 units)
An introductory level course in the use of the Microsoft Access database management program. Designed to provide tools to solve typical database problems. Includes the design of tables, relationships, queries, forms, reports and web pages to provide customized information. **Hours:** 27 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B70a Introduction to Microsoft Office Powerpoint 2007 (1 unit)
An introduction to the use of the Microsoft Powerpoint presentation package to create professional quality electronic presentations. Covers 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. Also covers using Powerpoint to convert existing information such as word processing, and graphic data into a presentation. **Hours:** 18 lect. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B73 Introduction to the Internet (1.5 unit)
An introduction to the history, structure, and use of the Internet. Students will learn how to browse the Internet, efficiently find reliable information online, communicate online, download files, and create a simple web page. They will also learn methods of protecting themselves and their computers from online security risks. **Hours:** 27 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B74a Web Design: Macromedia Dreamweaver (3 units)
An introduction to the design, planning and creation of Web sites using a variety of resources. Emphasizes the use of popular Web-authoring tools to create custom Web pages without the knowledge of hypertext markup language. **Recommended:** COMS B52a with a grade of C or higher or evaluation by instructor of student’s ability to navigate the Internet. **Hours:** 54 lect. **Offered:** F, S. **Repeat:** 3. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B74b Web Design: HTML & XML (3 units)
An introduction to using hypertext mark-up language(s) to create Web sites. Students will learn how to create, debug and modify websites using mark-up language(s). **Recommended:** COMS B52a with a grade of C or higher 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. **Hours:** 54 lect. **Offered:** F, S. **Repeat:** 3. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
COMS B74c  Web Development: JavaScript/CSS  
(3 units)  
Uses JavaScript, Cascading Style Sheets, and other scripting languages 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. Recommended: COMS B74b with a grade of C or higher. Hours: 54 lect. Repeat: 3. CCS: Occupational Education. Not Transferable: Associate Degree only.

COMS B74e  Web Design: Advanced Dreamweaver  
(3 units)  
Designing and implementing intermediate web-authoring components and concepts using Macromedia Dreamweaver. Covers techniques for implementing tables, frames, forms, components and data-driven applications in an intermediate-level-setting. Also covers integration of design with technology components. Recommended: COMS B74a with a grade of C or higher or evaluation by instructor of student’s web authoring skills. Hours: 54 lect. Repeat: 3. CCS: Occupational Education. Not Transferable: Associate Degree only.

COMS B74f  Advanced Web Development: Web Authoring Tools (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 with a grade of C or better or evaluation by instructor of student’s web authoring skills. Hours: 27 lect, 27 lab by arrangement. Repeat: 3. CCS: Occupational Education. Not Transferable: Associate Degree only.

COMS B75a  Web Application Development: Database Driven Web Sites (1.5 units)  
Students will learn how to use the tools in Microsoft Access and Microsoft FrontPage to develop database-driven web sites. Covers the appropriate use of database-driven web pages and basic web server set up and management. Prerequisite: COMS B74a with a grade of C or better or evaluation by instructor of student’s web design experience. Hours: 27 lect, 27 lab by arrangement. Repeat: 3. CCS: Occupational Education. Not Transferable: Associate Degree only.

COMS B75b  Web Programming: Active Server Pages (3 units)  
An overview of the use of Active Server Pages to develop Web applications that incorporate server-side scripting, database connectivity and communication protocols. Hours: 54 lect, 54 lab by arrangement. CCS: Occupational Education. Not Transferable: Associate Degree only.

COMS B75c  Web Programming: PHP (3 units)  
An introduction to the use of the PHP platform to develop dynamic web applications. Covers the origins, syntax and structure of PHP, as well as the PHP-specific commands and objects and their use in PHP development. Hours: 54 lect, 54 lab arranged. CCS: Occupational Education. Not Transferable: Associate Degree only.

COMS B75d  Web Application Development: ColdFusion (3 units)  
An introduction to the use of the ColdFusion platform to develop dynamic web applications. Covers the basic syntax, tag structure and server functions, as well as the use of ColdFusion to read from and write to a database. Prerequisite: COMS B74b with a grade of C or better. Hours: 54 lect, 54 lab arranged. CCS: Occupational Education. Not Transferable: Associate Degree only.

COMS B75e  Web Dev: Ruby on Rails/AJAX (3 units)  
An introduction to the Ruby on Rails framework for rapidly developing web applications using databases and the Ruby programming language. Recommended: COMS B74a with a grade of C or higher or evaluation by instructor of student’s web authoring skills. Hours: 54 lect. Repeat: 3. CCS: Occupational Education. Not Transferable: Associate Degree only.

COMS B76a  Web Design: Macromedia Flash (3 units)  
The use of Macromedia Flash to develop interactive, animated web sites. Students will learn how to create custom graphics, import images and music, and create animated movies using various animation techniques and ActionScript, Flash’s internal scripting language. Prerequisite: COMS B74a with a grade of C or better or evaluation by instructor of student’s web design experience. Hours: 54 lect, 54 lab by arrangement. CCS: Occupational Education. Not Transferable: Associate Degree only.

COMS B76b  Web Design: Advanced Flash (1.5 units)  
An advanced class focusing on the use of ActionScript to produce interactive web sites in Macromedia Flash. Covers objects, target paths, data validation, loading external assets and other concepts. Prerequisite: COMS B76a with a grade of C or better. Hours: 27 lect, 27 lab arranged. CCS: Occupational Education. Not Transferable: Associate Degree only.

COMS B77  Introduction to ArcGIS-1, an ERSI Authorized Training Program (1 unit)  

COMS B77b  Spatial Analysis and Data Modeling in GIS (1.5 units)  
Introduces the theories and technology behind spatial analysis and spatial modeling in geographic information systems (GIS). Takes the student beyond vector data and into raster (grid) datasets. Students learn to conduct meaningful analysis with GIS, which can be applied to conservation, municipal planning, business, and the social sciences. Covers the use of...
COMS B78 Advanced ArcView GIS (1 unit)
Advanced techniques to perform complex analyses on geographic data by applying ArcView’s core functionality. Topics include data management; data presentation in layouts, reports, and interactive applications; spatial analysis and spatial modeling; Avenue scripts and Arc View extensions. Students can earn an ESRI Certificate of Specialization in Advanced Arc View GIS. **Prerequisite:** COMS B37 or COMS B77 with a grade of C or better or the equivalent. **Hours:** 27 lect. **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 with a grade of C or better or evaluation by instructor of student’s Visual Basic programming skills. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect, 54 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 - 1 level prior to transfer. COMS B52a and COMS B82 with a grade of C or better. **Hours:** 54 lect, 54 lab by arrangement. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B82 CompTIA Network+ (Networking Technologies) (3 units)
Designed for individuals interested in a career in computer networking. Course prepares students for the vendor-neutral CompTIA Network+ certification exam. Topics covered include: networking fundamentals, the OSI model, network protocols, logical and physical architectures in both local and wide area networks, the physical parts of a network (wiring, NICs, hubs, routers, bridges and switches), popular network operating systems, network troubleshooting and security. **Recommended:** COMS B52a with a grade of C or better (Windows Operating System) and Reading - 1 level prior to transfer. **Hours:** 54 lect. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B87 Introduction to Remote Sensing (1.5 units)
An introduction to fundamentals of remote sensing science and digital image processing. Focus on remote sensing principles. Hands-on experience of the processing and interpretation of remotely sensed data using image processing techniques and software. This course is intended to provide information necessary to successfully use remotely sensed imagery in conjunction with other geospatial technologies to answer questions about the world in which we live. The class will cover the use of ERDAS Imagine® suite of software tools. **Recommended:** COMS B37, or COMS B77 with a grade of C or better, or evaluation by the instructor of student’s knowledge of computer information systems and software applications. **Hours:** 27 lect. **Repeat:** 2. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B91 MCSE Administering and Supporting Microsoft Windows Server 2003 (3 units)
Course serves as a detailed evaluation of Microsoft Windows server, including both the Client an Server software. Covers introductory and in-depth topics related to Client and Server Administration, as well as the core components of the operating system. This course is in preparation for the MCSE exams. **Recommended:** COMS B52a with a grade of C or better (Windows Operating System), and COMS B82 (Network Technologies), and Reading - 1 level prior to transfer. **Hours:** 54 lect, 54 lab by arrangement. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B92 Windows 2000 Professional (MCSE 70-210 Exam Prep) (3 units)
Prepares students to take the Microsoft Certified Systems Engineer exam 70-210. Trains students in the operation of Microsoft Windows 2000 Professional and its integration with Microsoft Networking products. Recommended: Reading - 1 level prior to transfer. **Hours:** 54 lect, 54 lab by arrangement. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

COMS B93 Microsoft Active Directory Services (MCSE 70-219 Exam Prep) (3 units)
An introduction to Microsoft Active directory Services (MCSE 70-219 Exam Prep). Covers how to plan, configure, and administer active directory services. Hands on experience includes configuring Domain name System (DNS), managing user accounts and permissions, network resources, and how to implement and troubleshoot security in an active directory environment. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect, 54 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 - 1 level prior to transfer. **Hours:** 54 lect. **Offered:** S. CCS: Occupational Education. **Not Transferable:** Associate Degree only.

**COMS B96 Applied Linux (3 units)**
Introduces students to the applied use of the Linux Operating System. Covers in-depth topics related to configuring both Client and Server software and administration. **Recommended:** COMS B41, COMS B82, COMS B95 with a grade of C or better or evaluation by instructor of student’s ability to use the Linux Operating System and knowledge of computer networking. **Hours:** 54 lect. CCS: Occupational Education. **Not Transferable:** Associate Degree only.

**COMS B100 Computer Hardware Diagnostics (4 units)**
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:** 54 lect, 54 lab by arrangement. **Offered:** F. CCS: Occupational Education. **Not Transferable:** Associate Degree only.

**COMS B101 Web Systems and Security (3 units)**
This course builds upon the foundational knowledge from the more introductory web development courses to explore some of the more advanced and complex concepts that one should master in order to become a successful webmaster. **Prerequisite:** COMS B74b with a grade of C or better or evaluation by instructor of student’s web design experience. **Hours:** 54 lect, 54 lab by arrangement. **Repeat:** 3. CCS: Occupational Education. **Not Transferable:** Associate Degree only.

**COMS B110 Computer Studies Internships (1-3 units)**
Work internship in a computer related field. **Hours:** 48-144 arranged. **Repeat:** 3. CCS: Occupational Education. **Not Transferable:** Not degree applicable.

**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.

**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, related safety and math, print reading, and construction techniques investigated. **Recommended:**

**CNST B2 Estimating and Scheduling (3 units)**
Techniques in managing and organizing a construction project including plan reading, estimating, and scheduling are covered. The extraction of the information necessary to calculate quantities and costs is investigated. The use of computer programs to manage a construction project and to calculate the cost and keep track of the scheduling is explored and practiced. Practice and theory are pursued. **Recommended:** CNST B1 with a grade of C or better or one year work experience in the construction related industry. **Reading - 1 level prior to transfer.** Hours: 54 lect. CCS: Occupational Education. **Transferable:** CSU and private colleges.

**CNST B50a Residential Construction (6 units)**
Intended to provide students with an overview of the construction trade. Various aspects of residential construction from site preparation through framing phases will be studied and performed. Special interest will be on construction safety and the initial (rough) phases of construction. Finish carpentry phases and techniques will also be introduced. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect, 162 lab. CCS: Occupational Education. **Not Transferable:** Associate Degree only.

**CNST B50b Residential Construction (6 units)**
Intended to provide students with an overview of the construction trade. Various aspects of residential construction from post framing (rough phases) to final completion will be studied and performed. Special interest will be on construction safety and the finish carpentry phases of construction. Initial (rough) phases and techniques will be reviewed. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect, 162 lab. CCS: Occupational Education. **Not Transferable:** Associate Degree only.

**CORRECTIONAL ADMINISTRATION**
*Note: CADM courses numbered B1 through B4 have been changed to CRIM B21 through B24 and fall under Criminal Justice.*

**CADM B54 Corrections Officer Core Course (7 units)**
Provides the student with necessary knowledge and skills required to effectively supervise inmates in a correctional setting. Designed to comply with the Corrections Standards Authority in the Standards and Training for Corrections Basic Core Course. Covers professionalism, ethics, laws, custody, supervision of inmates, handling of contraband, restraint techniques, cell extractions, weaponless defense, physical conditioning, first aid, and CPR. **Hours:** 90 lect, 118 lab. **Repeat:** 2. CCS: Occupational Education. **Not Transferable:** Associate Degree only.
CADM B55 Deputy Probation Officer Core Course (3.5 units)
Introductory probation officer training providing the necessary knowledge and skills for entry level deputy probation officers. Designed to comply with the State of California, Board of Corrections Standards and Training for Corrections (STC). Covers professionalism, ethics, introduction to the criminal justice system, laws, confidentiality, juvenile detention, case information and problem identification, interviewing, restitution, report writing, casework, counseling, monitoring and supervision offenders, officer safety, defensive tactics, and physical skills. **Hours**: 140 lect, 36 lab. **Repeat**: 2. CCS: Occupational Education. **Not Transferable**: Not degree applicable.

CADM B56 Special Topics (0.2 - 3 units)
Various mandated training topics required by Standards and Training in Corrections (STC) from the California Board of Corrections. **Hours**: 8 lect for each 0.2 units. **Repeat**: Unlimited. CCS: Occupational Education. **Not Transferable**: Not degree applicable.

CADM B57 Juvenile Institutions Officer Core Course (6 units)
Designed to meet the requirements for entry-level staff for employment in a juvenile correctional institution. Written to comply with the State of California, Board of Corrections, Standards and Training for Corrections (STC). **Hours**: 116.5 lect, 51.5 lab. **Repeat**: 2. **Offered**: F, S, S. CCS: Occupational Education. **Not Transferable**: Not degree applicable.

CADM B58 Supervisor Core Course (3 units)
Provides the STC training curriculum for newly promoted corrections supervisors. Includes supervisory role identification, leadership styles, values, ethics, principles, assertive leadership, employee performance appraisals, liability issues and legal updates, discipline, employee counseling, investigations, report review, and team building. Meets the training requirements set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. **Hours**: 56 lect, 24 lab. **Repeat**: Unlimited. CCS: Occupational Education. **Not Transferable**: Not degree applicable.

CADM B70a Prisoner Transportation (0.2 unit)
Intended for peace officers, correctional officers, juvenile institutions staff and probation officers. Covers various modes of prisoner transportation, the risks involved, and how to achieve a secure transportation including the application and use of mechanical restraints. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. **Hours**: 7 lect, 1 lab. **Repeat**: Unlimited. CCS: Occupational Education. **Not Transferable**: Not degree applicable.

CADM B70b Prison Gangs (0.2 unit)
Intended for people working in law enforcement and corrections. Topics include identifying known prison gangs, gang member identification/activities, policies on gang validation recruitment measures, interviewing techniques and protective custody measures for gang dropouts. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. **Hours**: 8 lect. **Repeat**: Unlimited. CCS: Occupational Education. **Not Transferable**: Not degree applicable.

CADM B70c Escape Prevention (0.2 unit)
Intended for people working in corrections. Covers escape prevention procedures that deal primarily with basic institutional security principles, accountability of inmates, human error, and techniques used for escape prevention. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. **Hours**: 8 lect. **Repeat**: Unlimited. CCS: Occupational Education. **Not Transferable**: Not degree applicable.

CADM B70d Suicide Prevention (0.2 unit)
Designed for students who work in corrections. Covers identifying the potential for suicide, prevention techniques, intervention and responses including proper communication techniques during a crisis. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. **Hours**: 8 lect. **Repeat**: Unlimited. CCS: Occupational Education. **Not Transferable**: Not degree applicable.

CADM B70e Handling Aggressive and Assaultive Inmates (0.2 unit)
Provides training to corrections staff. Examines the violent criminal, explains the reasons for inmate violence, and offers tools to de-escalate confrontations. Provides demonstrations and an opportunity to practice evasive defense tactics. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. **Hours**: 4 lect, 4 lab. **Repeat**: Unlimited. CCS: Occupational Education. **Not Transferable**: Not degree applicable.

CADM B70f Sexual Harassment Prevention (0.2 unit)
Designed for students who work in law enforcement/ corrections. Identifies sexual harassment from a legal, moral and social concept. Provides advice and counsel on how to prevent sexual harassment in the workplace. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. **Hours**: 8 lect. **Repeat**: Unlimited. CCS: Occupational Education. **Not Transferable**: Not degree applicable.
COURSE DESCRIPTIONS

BAKERSFIELD COLLEGE COURSE DESCRIPTIONS

CADM B70g Understanding Prejudice (0.2 unit)
Intended for people working in law enforcement and corrections. Covers tolerance of others who are unlike oneself, cultural differences, values and beliefs. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 8 lect. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B70h Crime Scene Preservation and Investigation (0.2 unit)
Intended for correctional officers, juvenile institutions staff and probation officers. Provides the required competencies to identify a crime scene, preserve evidence, mark and collect physical, trace and transient evidence. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 6 lect, 2 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B70i Anger Management (0.2 unit)
Intended for people working in law enforcement and corrections. Provides students with tools to control their own anger as well as a process to deal with angry people. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 8 lect. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B70j Informant Development and Management (0.2 unit)
Designed for students who work in corrections. Provides the communication tools and legal framework necessary for successful implementation, use and protection of informants in a correctional institution. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 8 lect. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B70k Anatomy of a “Set Up” - How Inmates Manipulate Correctional Staff (0.2 unit)
Provides training to corrections staff on theories of crime, criminal thinking and behavior, how inmates will select, test and attempt to manipulate staff. Identifies the signs that contribute to and make employees receptive to a set up and con games. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 8 lect. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B70l Use of Force and Civil Liabilities (0.2 unit)
Designed for students who work in corrections. Identifies specific trends in civil liabilities in the field of corrections with a focus on use of force. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 8 lect. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B70m Drug Recognition and Under the Influence (H&S 11550) (0.2 unit)
Provides training to law enforcement, corrections and security officers (also recommended for educators). Prepares students to identify specific illicit drugs and the signs and symptoms of drug use and influence. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 7 lect, 1 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B70n Fire and Life Safety (0.2 unit)
Hands-on training for corrections institution staff in fire prevention and suppression. Provides the knowledge and skills necessary for fire and emergency responses. Topics include evacuation management, tactical control measures, use of fire suppression equipment, and use of the SCBA, search and rescue techniques. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 5 lect, 3 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B70o Positive Inmate Staff Relations Through Communication and Ethics (0.2 unit)
Provides training to corrections staff. Develops practical communication and ethical skills toward a positive inmate staff working relationship in a jail/institutional environment. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 8 lect. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B70p Emergency Procedures (0.2 unit)
Designed for corrections staff. Provides an overview of various emergencies arising within a correctional facility, including natural disasters, riots, work strikes, escapes. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 8 lect. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.
CADM B70r Inmate Work Incentive Program (0.2 unit)
State law mandates that “every inmate shall have a reasonable opportunity to participate in a full-time credit qualifying assignment consistent with institutional security and available resources.” This course is designed for the correctional officer who supervises such inmates. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. **Hours:** 8 lect. **Repeat:** Unlimited. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

CADM B70s Women in Corrections (0.2 unit)
Designed for students who work in corrections. Explores the history of women in corrections and the career developments for women that have evolved in the field of corrections. Other topics include special training needs, problems and restrictions placed on women, and developing a mentoring program for female correctional staff. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. **Hours:** 8 lect. **Repeat:** Unlimited. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

CADM B70t Blood Borne Pathogens, T.B. Awareness, Psychotic Inmates (0.2 unit)
Primarily designed for students who work in corrections. Learn how to prevent the transmission of blood borne pathogens, identify Tuberculosis awareness factors, recognize and deal with psychotic inmates. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. **Hours:** 8 lect. **Repeat:** Unlimited. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

CADM B70u Conflict Resolution and Hostage Survival (0.2 unit)
Designed for students who work in corrections. Covers conflict resolution and develops skills to defuse and de-escalate confrontational situations. Teaches tactics and techniques to avoid being taken hostage, and what to do if taken hostage in a correctional setting. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. **Hours:** 8 lect. **Repeat:** Unlimited. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

CADM B70v Facility and Inmate Searches (0.2 unit)
Provides training for corrections staff. Develops and enhances the knowledge and skills of searching both inmates and facilities. Covers searching techniques, clothed and unclothed body searches, and the current trends of introduction of contraband into a facility. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. **Hours:** 8 lect. **Repeat:** Unlimited. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

CADM B70w Restraint Gear Application (0.2 unit)
Provides explanation and hands-on practice for the proper application and use of restraint gear. Explains how some gear can be slipped, picked, shimmed or broken. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. **Hours:** 8 lect. **Repeat:** Unlimited. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.
CORRECTIONAL ADMINISTRATION

COURSE DESCRIPTIONS

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CADM B71g Advanced Report Writing (0.2 unit)
Provides written communication training to corrections line staff and first line supervisors. Provides examples and an opportunity to practice report writing. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 4 lect, 4 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B71h Transportation/Escape Procedures (0.2 unit)
Intended for peace officers, correctional officers, juvenile institutions staff and probation officers. Introduction to various modes of transportation of adult and juvenile inmates. Includes proper use of restraints and proper searching techniques. Covers risks and techniques to prevent escapes. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 6.5 lect, 1.5 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B71i Violence in the Workplace (0.2 unit)
A discussion of fatal and nonfatal violence in the work place to determine the focus needed for prevention. Emphasis will be made on changes to be instituted to help minimize or remove the risk of workplace violence. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 8 lect. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B71k Rights of Prisoners (0.2 unit)
An introduction to the rights and privileges that inmates have while they are incarcerated. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 8 lect. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B71l Progressive Discipline (0.2 unit)
Intended for people working in corrections. Teaches method of “Progressive Discipline” utilized in a correctional setting to ensure uniform consistency, avoid confusion, follow “due process” requirements and create a positive behavior change among inmates. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 6 lect, 2 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B71m Stress in the Corrections Environment (0.2 unit)
Intended for people working in corrections. Identifies stress, how it affects both the physical and mental health of individuals. Topics include identifying symptoms of stress, recognizable physical and psychological reactions to stress, and stress reducers/relaxation techniques. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 7 lect, 1 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B71n Positive Thinking in Corrections (0.2 unit)
Intended for people working in corrections. Identifies the premise that a positive attitude in the correctional workplace fosters job satisfaction, builds self-esteem, and reinforces desired performance. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 6 lect, 2 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B71o Assertiveness Training for Corrections (0.2 unit)
Trains correctional officers to present themselves as confident, effective communicators and therefore enjoy better inmate control and institutional effectiveness. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 6 lect, 2 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B71p Employee Post Trauma (0.2 unit)
Intended for people working in corrections. Covers basic assessment tools, methods of coping, as well as tools and skills to facilitate post traumatic recovery. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 6 lect, 2 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B71q Liability Issues and Courtroom Demeanor (0.2 unit)
Intended for people working in corrections. An introduction to the legal liabilities and responsibilities of corrections personnel while at work and expectations when called to testify in a court of law. Other topics include identification of adverse employees, insufficient training, and negligent supervision of others. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 8 lect. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.
CADM B71r Prison Rape Elimination Act (PREA) (0.2 unit)
Provides the skills necessary to investigate complaints, threats, or signs of sexual assault/rape against inmates. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 8 lect. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B72 Chemical Agents (0.2 unit)
Intended for peace officers, correctional officers, juvenile institutions staff and probation officers. Provides the required competencies and certification for the use of chemical agent sprays. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 6 lect, 2 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B73 Basic Baton Course (0.2 unit)
Provides students with the practical, safe, legal and technical aspects of the use of the police baton. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 2 lect, 6 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B74 Weaponless Defense and Control Tactics (0.2 unit)
Provides training to law enforcement, corrections and security officers to perform their daily tasks with less danger to themselves and to increase their ability to control suspects and prisoners in a humane and lawful manner. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 2 lect, 6 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B75 Surviving Edged Weapons (0.2 unit)
Provides training to law enforcement, corrections staff and security officers. Teaches responses to the mounting threat of “knife culture” offenders. Topics covered include safe positioning, communicating commands to inmates, how to assess an edged weapon assailant, evasive defensive tactics and disarming techniques. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 3 lect, 5 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B76 Basic Firearms Familiarization (0.2 unit)
Designed to give the first-time shooter hands-on experience as well as knowledge of the operation of a handgun and range safety. Students will engage in the use of firearms which will include handgun familiarization, safety, care, cleaning and storage, firearms range qualification. Special Note: Per penal code section 13511.5, students must obtain written clearance from the California Department of Justice verifying that they are not prohibited from possessing firearms. Hours: 4 lect, 4 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B77 Intermediate Firearms Course (0.4 unit)
Designed to expand upon the skills and knowledge of firearms familiarity and range safety. Students will engage in the use of firearms which will include safe handing, care, cleaning and storage, and firearms range qualification. Special Note: Per penal code section 13511.5, students must obtain written clearance from the California Department of Justice verifying that they are not prohibited from possessing firearms. Hours: 8 lect, 8 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B78 Less Lethal/Speciality Impact Weapons (0.2 units)
Provides training to law enforcement, corrections and security officers in the proper, safe, legal, technical and practical use of less lethal/speciality impact weapons. A demonstration of such weapons and munitions will be conducted. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 4 lect, 4 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CADM B79 Emergency Response Team Training (1.5 units)
Provides training for newly appointed officers to a Correctional Emergency Response Team (CERT). Covers the duties of a CERT team member including transport of high risk inmates, extracting uncooperative prisoners from their cells, searches, high profile security, barricaded persons, mass arrest and responding to hostage situations. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program. Hours: 24 lect, 56 lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

CRIM B1 Introduction to Criminal 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
CRIMINAL JUSTICE

CRIM 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; case preparation; and the investigation of specific crimes. Recommended: Reading - 1 level prior to transfer. Hours: 54 lect. Offered: S. CCS: Occupational Education. Transferable: CSU and private colleges.

CRIM B9 Juvenile Justice System (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 - 1 level prior to transfer. Hours: 54 lect. Offered: S. CCS: Occupational Education. Transferable: CSU and private colleges.

CRIM 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 management of crime control units. Recommended: Reading - 1 level prior to transfer. Hours: 54 lect. Offered: S. CCS: Occupational Education. Transferable: CSU and private colleges.

CRIM B12 Forensic and Scientific Aspects of Evidence (3 units)
The examination and evaluation of evidence using scientific principles and procedures for use in a legal setting including forensic pathology (autopsy), entomology, anthropology, trace evidence (hair and fiber), fingerprints, serology, ballistics, and DNA. Emphasis on the importance of forensic evidence and science to exonerate the innocent as well as to convict the guilty. Recommended: Reading - 1 level prior to transfer. Hours: 54 lect. Field trips required. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only. BC GE D.2

CRIM B21 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 - 1 level prior to transfer. Hours: 54 lect. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

CRIM B22 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 - 1 level prior to transfer. Hours: 54 lect. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

CRIM B23 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
BAKERSFIELD COLLEGE COURSE DESCRIPTIONS

DANC B6jd Jazz Dance (1 unit)
Fundamental jazz techniques and fundamental terminology of ballet as they relate to jazz dancing 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: 54 activity. Repeat: 3. CCS: Liberal Arts & Sciences. Transferable: CSU and private colleges. Note: Same as PHED B6jd. BC GE E; CSU GE C.1.

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 B50, Reading - 1 level prior to transfer. MATH BA with a grade of C or higher or one year of high school algebra. Hours: 54 lect. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE D.2; CSU GE D.2; IGETC 4.
**ECON B2 Principles of Economics-Macro (3 units)**
Principles of economic analysis and decision making from the viewpoint of the society. Emphasis on 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 B50, Reading - 1 level prior to transfer. MATH BA with a grade of C or higher or one year of high school algebra. **Hours:** 54 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE D.2; CSU GE D.2; IGETC 4.

**ELECTRONICS TECHNOLOGY**

**ELET B1 Basic Electronics (DC and AC) (4 units)**
Introduction to electricity and electronics including basic components, electronic circuit calculations, basic electronic test equipment use, electrical measurement, relays and ladder diagrams, alternating current (AC) circuits, and electronic schematic diagrams. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect, 54 lab. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

**ELET B4 Computer Integrated Manufacturing (3 units)**
Introduction to industrial automation technologies and the procedures utilized when troubleshooting automated control systems. Topics include programmable logic controllers (PLC), machine control, industrial robots, barcode readers, material handling systems, and Ethernet communications. **Recommended:** Reading - 1 level prior to transfer. **Prerequisite:** ELET B5 with a grade of C or better. **Hours:** 45 lect, 27 lab. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Elective credit only. Not open to students who have completed MFGT B4 or MFGT B50.

**ELET B5 Programmable Logic Controllers (3 units)**
The function and application of programmable logic controllers. Students will become familiar with the programming of Allen Bradley SLC-500 series controllers with RSLogix software. Topics covered include bit-level input and output instructions, timers, counters, latches, documentation, and troubleshooting. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 45 lect, 27 lab. **Offered:** F, S. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Elective credit only. Not open to students who have taken both ELET B9 and ELET B12.

**ELET B6 Analog and Digital Electronics (4 units)**
Applications of analog and digital electronic circuits and systems. Content includes: semiconductor components, analog circuits (power supplies, amplifiers, and oscillators), digital electronic circuits (logic gates, sequential logic circuits), digital signal processing (A/D and D/A conversion), equivalent to ELET B9 plus ELET B12. **Prerequisite:** ELET B1 with a grade of C or better. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect, 54 lab. **Offered:** F, S. **Repeat:** 1. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Elective credit only. Not open to students who have taken both ELET B9 and ELET B12.

**ELET B55a Electric Motors - Controls (4 units)**
Basic principles, applications, and configuration of direct current and alternating current motors and generators, motor starters, basic motor control circuitry and applications, and an introduction into variable frequency motor drives (VFD’s). **Prerequisite:** ELET B1 with a grade of C or better. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect, 54 lab. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
ELET B56 Instrumentation and Process Control
(3 units)
Basic principles of process instrumentation and control. Topics include level, pressure, flow, and level measurement, final control elements, piping and instrument diagrams and tags, PID controller programming, and basic control algorithms. Prerequisite: ELET B1 with a grade of C or better. Recommended: Reading - 1 level prior to transfer. Hours: 45 lect, 27 lab. Repeat: 1. CCS: Occupational Education. Not Transferable: Associate Degree only.

ELET B58 Advanced Programmable Logic Controllers
(3 units)
The function and application of programmable logic controllers. Students will become familiar with the programming of Allen Bradley Control Logix series controllers with RSLogix 5000 software, providing all of the basics of using the Rockwell Automation’s Control Logix platform of PLC’s. It will allow students to be involved with either maintenance, or engineering of controls systems and machinery with the latest technology from Rockwell Automation. Students will have both theory and lab time, learning how to put a system together, understanding the memory and data structure of the PLC, and writing simple programs. Documenting the written program utilizing the features of the programming software as well as troubleshooting techniques will also be emphasized throughout the course. Prerequisite: ELET B5 with a grade of “C or better.” Hours: 36 lect, 54 lab. Repeat: 1. CCS: Occupational Education. Note: Elective credit only. Not Transferable: Associate Degree only.

EMERGENCY MEDICAL TECHNICIAN

EMTC B50 Emergency Medical Technician-1 (7.5 units)
Foundation skills and assessment techniques to care for an ill or injured person in the pre-hospital setting. Follows state regulations for EMT-1 training and leads to certification at the county level. Required for ambulance personnel and appropriate for many other first care providers such as law enforcement and fire personnel. The student must meet Allied Health Department health requirements to participate in the laboratory section of the course. Any expenses involved in meeting the health requirements are the student’s expense. Must be at least 18 years of age by the end of class. Mandatory physical examination/immunizations will be required within two weeks of the beginning of the course and are at the student’s expense. Failure to meet these requirements will result in student ineligibility for clinical objectives. Prerequisite: Students must have a copy of a current BLS (American Heart Association Health Care Provider) card. Recommended: MEDS B60 with a grade of C or higher (3 units). Hours: 128 lect plus 24 ER/ambulance experience. Offered: F, S. Repeat: As necessary for state EMS regulations. CCS: Occupational Education. Not Transferable: Associate Degree only.

ELET B63 Electronic Systems Installation (3 units)
Electronic System Installation covers the design, installation, integration, and certification of residential low-voltage wiring systems, such as: telephone, data communications, video systems, cable and satellite systems, audio systems, home automation, security systems, and other integrated home technologies. Hands-on installation, testing, and certification of these systems will occur during the lab portion of this course. Students will be prepared for residential low-voltage industry certifications. Prerequisite: ELET B1 with a grade of C or better or evaluation by the instructor of student’s basic electronic skills. Recommended: Reading - 1 level prior to transfer. Hours: 45 lect, 27 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.
ENGR B17 Introduction to Electric Circuits (3 units)
Principles and techniques of D.C. and A.C. circuit analysis, including Kirchhoff’s laws, mesh and nodal analysis, Thévenin’s and Norton’s theorems, impedance, phasors, frequency response, power calculations, natural and forced responses, analog building blocks, operational amplifiers, and Laplace transforms. **Prerequisite:** PHYS B4b with a grade of C or better. **Recommended:** MATH B6d with a grade of C or higher (may be taken concurrently). **Hours:** 54 lect. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ENGR B17L Electric Circuit Laboratory (1 unit)
Experimental verification of the electric circuit laws including Ohm’s law, Kirchhoff’s laws, network theorems, mesh and nodal analysis, Thévenin and Norton analysis, OP-amp circuits, sinusoidal RC, RL, RLC circuits, phasors, and ideal transformer. Use of electrical instruments and development of laboratory techniques. **Prerequisite:** ENGR B17 with a grade of C or better (may be taken concurrently). **Hours:** 54 lab. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges.

ENGR B19C/C++ Computer Programming for Science, Engineering and Technology (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 B19C/C++ primarily uses the C programming language with input/output and object-oriented programming features of the C++ programming language. **Prerequisite:** MATH B6a with a grade of C or better (may be taken concurrently). **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect. **Offered:** F.S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ENGR B20 Introduction to Engineering and Design (3 units)
Introduction to the techniques of calculation and survey instrument use in field measurements. Topics include measurements of distances, angles, and directions; differential leveling; traversing and traverse computations; total station instrument use and field procedure; coordinate geometry and area calculations; topographic surveys/mapping. **Prerequisite:** High school trigonometry or TECM B52 or concurrent enrollment in MATH B1b with a grade of C or higher. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 36 lect, 54 lab. **CCS:** Liberal Arts and 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 B1b or higher with a grade of C or better. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 18 lect, 54 lab. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

ENGR B26 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 with a grade of C or better. **Hours:** 54 lect. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

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 with a grade of C or better. **Hours:** 54 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and Private Colleges.

ENGR B40 Surveying I (3 units)
Construction surveying methods and computations. Study of the surveying procedures in construction, including volume computations, horizontal curves, compound curves, reverse curves, vertical curves, staking, grading, profiles and cross sections. Instrument experience is emphasized with both use and care of electronic and mechanical surveying equipment. Introduction to global positioning systems and photogrammetry. **Prerequisite:** ENGR B40 with a grade of C or higher. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 36 lect, 54 lab. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

ENGR B41 Surveying II Construction Surveying (3 units)
Internal structure of engineering materials. Characteristic 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 B1b and CHEM B1a and PHYS B4a OR MATH B1b and CHEM B2a and PHYS B2a with a grade of C or higher. **Hours:** 36 lect, 54 lab. **Offered:** F. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges.

ENGR B47 Introduction to Engineering and Design (3 units)
Introduction to the engineering profession and the engineering design process. Engineering Profession: Survey of engineering disciplines, functions, communications, and ethics. Includes...
development of a personal educational plan. Satisfies 0.5 educational planning requirement for graduation from Bakersfield College. Engineering Design: Introduction to the design process and some of the computational skills required to solve engineering problems. Students will work in teams to design, manufacture, and test a simple product. Some training in the use of Excel to solve engineering problems. 

**Recommended:** MATH BD with a grade of C or better. **Hours:** 36 lect, 54 lab, 1 field trip. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

**ENGR B60 Introduction to Robotics (3 units)**

Introduction to the basic concepts and control application of robotics. The operation of different types of end actuators is covered along with robotic microcontrollers and basic system sensors. Basic programming techniques are covered. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 36 lecture, 54 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**ENGLISH**

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

**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, B50, and B1a are sequential courses designed to develop proficiency in writing. ENSL B70, B60, and B50 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. After being placed, students must pass the course for that level with a minimum grade of “C” before advancing to the next level. Students must meet eligibility requirements for admission into composition courses.

Eligibility for specific courses at placement is as follows: students placed at level 6 on the assessment tests are eligible for English B1a; those at level 5 are eligible for English B50; those at level 4 are eligible for English B60; and those at level 3 are eligible for Academic Development B68 (see Academic Development department).

**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 B50 or ENSL B50 with a grade of “C” or English Level 6. **Hours:** 72 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE A.2; CSU GE A.2; IGETC 1.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 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE A.3, C.2; IGETC 3.B.

**ENGL B2 Advanced Composition and Critical Thinking (5 units)**

An interdisciplinary team-taught course. Expository writing, reading of expository and literary works; study of the most important ideas in great works in disciplines such as 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 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE A.3, C.2; IGETC 3.B.

**ENGL B5a Survey of English Literature (3 units)**

A historical survey of English literature, emphasizing critical reading of representative works from *Beowulf* through the eighteenth century. 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 B50 or ENSL B50 with a minimum grade of “C” or English Level 6. **Recommended:** ENGL B1b with a grade of C or better. **Hours:** 54 lect. **Offered:** F, S (two out of every three years). **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 3.B.

**ENGL B5b Survey of English Literature (3 units)**

A historical survey of English literature, emphasizing critical reading of representative works from the eighteenth century through the twenty-first century. 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 B50 or ENSL B50 with a minimum grade of “C” or English Level 6. **Recommended:** ENGL B1b with a grade of C or better. **Hours:** 54 lect. **Offered:** F, S (two out of every three years). **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 3.B.

**ENGL B10 Introduction to Shakespeare (3 units)**

This course involves the study of the drama and sonnets of William Shakespeare. Historical information regarding Shakespeare and Elizabethan England will be covered in order to increase students’ appreciation of his accomplishments. Discussions and video presentations will highlight the relevance
of Shakespeare’s work today. **Prerequisite:** Satisfactory completion of ENGL B50 with a minimum grade of “C” or English Level 6. **Hours:** 54 lect. Field trips may be required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 3.B.

**ENGL B20a Survey of World Literature**
A study of representative works of world literature in historical and cultural contexts, focusing on their aesthetic significance and the enduring human values which unite the different literary traditions. Covers antiquity to approximately 1650. Recommended for English and Comparative Literature majors and as an elective for majors in the humanities, history or education. **Prerequisite:** Satisfactory completion of ENGL B50 with a minimum grade of “C” or English Level 6. **Recommended:** ENGL B1b with a grade of C or better. **Hours:** 54 lect. **Offered:** F, S (two out of every three years). **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. BC GE C. CSU GE C.2, IGETC 3.B.

**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 B50 with a minimum grade of “C” or English Level 6. **Hours:** 54 lect. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 3.B.

**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 B50 with a minimum grade of “C” or English Level 6. **Hours:** 54 lect. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.2, D.4; IGETC 3.B.

**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 B50 with a minimum grade of “C” or English Level 6. **Hours:** 54 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 3.B.

**ENGL B28 Classical Mythology (3 units)**
A study of classical myth, saga, and local legend, primarily Greek and Roman. Relates classical myths to historical and modern culture. **Prerequisite:** Eligibility for ENGL B1a. **Hours:** 54 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. CSU GE C.2; IGETC 3.B.

**ENGL B30a Survey of American Literature (3 units)**
A study of the most notable American authors from the colonial period to the American Civil War 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 B50 with a minimum grade of “C” or English Level 6. **Recommended:** ENGL B1b with a grade of C or better. **Hours:** 54 lect. **Offered:** F, S (two out of every three years). **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 3.B.

**ENGL B30b Survey of American Literature (3 units)**
A study of the most notable American authors from the American Civil War 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 B50 with a minimum grade of “C” or English Level 6. **Recommended:** ENGL B1b with a grade of C or better. **Hours:** 54 lect. **Offered:** F, S (two out of every three years). **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 3.B.

**ENGL B34 Introduction to Library Research (1 unit)**
Lecture and hands-on research class which will develop a basic familiarity with libraries and information resources as a foundation for future research needs. Students will learn about different types of information resources, both in the Library and on the internet, and different search methods. Evaluation of resources, both print and electronic, is emphasized. Recommended: English Level 6. **Hours:** 18 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 LIBR B34.

**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 B50 with a minimum grade of “C” or English Level 6. **Hours:** 54 lect/demo and field practice by arrangement. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. BC GE C; CSU GE C.2.

**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. Covers basics of submitting manuscripts to publishers. **Prerequisite:** Satisfactory completion of ENGL B50 with a minimum grade of “C” or English Level 6. **Hours:** 54 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. BC GE C; CSU GE C.2.

**ENGL B50 Introduction to College Composition (4 units)**
Emphasizes the writing of expository and argumentative essays and the comprehension and analysis of readings. Prepares transfer students for English B1a. **Prerequisite:** ENGL B60 or ENSL B60 with a grade of “C” or better or ‘CR’ or English
Level 5. **Hours:** 72 lect. **Offered:** F, S, SS. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable. **Note:**

**ENGL B60 Basic Writing Skills (4 units)**
Review and application of fundamentals of standard English. Emphasizes sentence, paragraph, and short essay writing. **Prerequisite:** ACDV B68 or ENSL B70 with a minimum grade of “C” or ‘CR’ or English Level 4. **Hours:** 72 lect. **Offered:** F, S, SS. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

**ENGL B255 Supplemental Writing Lab (0.5 unit)**
Designed for students desiring additional assistance in specific writing assignments. Students will work on writing assignments from all college courses. Offered for Pass/No Pass grading only. **Hours:** 9 individualized instruction and supervised lab. **Repeat:** 3. **Offered:** F, S. **CCS:** Liberal Arts and Sciences. **Not Transferable:** Not degree applicable.

**ENGLISH AS A SECOND LANGUAGE**

**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.

**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 - 1 level prior to transfer. **Hours:** 40.5 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. **Elective:** Not degree applicable.

**ENSL B21 Intermediate Pronunciation and Listening (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 B71ab and ENSL B71cd with a grade of C or better. **Hours:** 54 lect/disc. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. Elective credit only.

**ENSL B22 Advanced Academic Communication (3 units)**
Individual prescriptive training in listening and pronunciation, pertaining to stress and intonation in spontaneous and formal speech samples. **Recommended:** ENSL B21 with a grade of C or better. **Hours:** 54 lect/disc. **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 which refines critical reading skills and vocabulary of college-level material in fiction and non-fiction. **Prerequisite:** ENSL B51 with a minimum grade of “C,” or placement based on the Bakersfield College English as a Second Language Placement Test. **Hours:** 54 lect/disc. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. **Note:** Elective credit only. BC GE C.

**ENSL B50 Introduction to 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. Prepares students for ENGL B1a. **Prerequisites:** ENSL B60 or ENGL B60 with a minimum grade of “C” or ‘CR,’ or placement based on the Bakersfield College English as a Second Language Placement Test. **Hours:** 72 lect. **Offered:** F, S, SS. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

**ENSL B51 High-Intermediate Reading and Vocabulary (4 units)**
Recommended for international and multi-lingual students who need to improve reading comprehension and build vocabulary in English. Emphasis is on identifying main ideas, summarizing, making inferences, and developing vocabulary, using more complex academic reading selections than in ENSL B61. **Prerequisite:** ENSL B61 with a minimum grade of “C,” or placement based on the Bakersfield College English as a Second Language Placement Test. **Hours:** 72 lect/disc. **Offered:** F, S, SS. **CCS:** Precollegiate - basic skills. **Not Transferable:** Not degree applicable.

**ENSL B60 Basic Writing Skills (4 units)**
Writing course for international/multilingual 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 B50 or ENGL B50. (A minimum grade of “C” in ENSL B60 will satisfy prerequisite for ENSL B50 or ENGL B50.) **Prerequisites:** ENSL B70 or ACDV B68 with a minimum grade of “C” or placement based on the Bakersfield College English as a Second Language Placement Test. **Hours:** 72 lect/
ENGLISH AS A SECOND LANGUAGE

ENSL B61 Basic Reading and Vocabulary (4 units)
Recommended for international and multilingual students who need to improve reading comprehension and build their vocabulary in English. Emphasis is on looking for main ideas, summarizing, making inferences, developing vocabulary, and using academic language. Prerequisite: Placement based on the Bakersfield College English as a Second Language Placement Test. Hours: 72 lect/disc. Offered: F, S, SS. CCS: Precollegiate - basic skills. Not Transferable: Not degree applicable.

ENSL B61N Basic Reading and Vocabulary (0 units)
Recommended for international and multilingual students who need to improve reading comprehension and build their vocabulary in English. Emphasis is on looking for main ideas, summarizing, making inferences, developing vocabulary, and using academic language. Prerequisite: Placement based on the Bakersfield College English as a Second Language Placement Test. Hours: 72 lect/disc. Repeat: Unlimited. Offered: F, S, SS. CCS: Precollegiate - basic skills. Not Transferable: Not degree applicable.

ENSL B70 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 B60. Prerequisite: ENSL B80 with a minimum grade of “C” or placement based on the Bakersfield College English as a Second Language Placement Test. Hours: 72 lect. Offered: F, S, SS. CCS: Precollegiate - basic skills. Not Transferable: Not degree applicable.

ENSL B71ab Basic Listening and Speaking I (4 units)

ENSL B71AN Basic Listening and Speaking I (0 units)

ENSL B71cd Basic Listening and Speaking II (4 units)
Improves the pronunciation, intonation, rhythm, and stress patterns of the non-native English speaking person. Aural comprehension in everyday conversational speech and classroom lectures will also be stressed. Prerequisite: ENSL B71ab with a grade of C or higher or placement based on the Bakersfield College English as a Second Language Placement Test. Hours: 72 lect/disc. Repeat: Unlimited. Offered: F, S, SS. CCS: Precollegiate - basic skills. Not Transferable: Not degree applicable.

ENSL B71CN Basic Listening and Speaking II (0 units)
Improves the pronunciation, intonation, rhythm, and stress patterns of the non-native English speaking person. Aural comprehension in everyday conversational speech and classroom lectures will also be stressed. Prerequisite: ENSL B71ab, ENSL B71AN with a grade of C or higher or placement based on the Bakersfield College English as a Second Language Placement Test. Hours: 72 lect/disc. Repeat: Unlimited. Offered: F, S, SS. CCS: Precollegiate - basic skills. Not Transferable: Not degree applicable. Note: Identical to ENSL B71cd.

ENSL B80 Preparation for Academic Writing (4 units)

ENSL B80N Preparation for Academic Writing (0 units)

ENSL B300N Field Introductory Level (0 units)
Beginning literacy level English as a Second Language multi-skill course for students with no previous English instruction, and for those who may be illiterate. Includes listening/speaking, writing, reading, and grammar development. Hours: 120 lect/disc. Repeat: Unlimited. CCS: Precollegiate basic skills. Not Transferable: Not degree applicable.

ENSL B301N Field Level 1 (0 units)
Beginning level English as a Second Language multi-skill course for students who are literate but have had little or no previous English instruction. Includes listening/speaking, writing, reading, and grammar development. Recommended: Qualification by CASAS assessment process or successful
completion of ENSL B300N. **Hours:** 120 lect/disc. **Repeat:** As needed. **CCS:** Precollegiate basic skills. **Not Transferable:** Not degree applicable.

**ENSL B302N Field Level 2 (0 units)**
High-beginning level English as a Second Language multi-skill course for students who have previous English instruction. Includes listening/speaking, writing, and grammar development. **Recommended:** Qualification by CASAS assessment process or successful completion of ENSL B301N. **Hours:** 120 lect/disc. **Repeat:** As needed. **CCS:** Precollegiate basic skills. **Not Transferable:** Not degree applicable.

**ENSL B303N Field Level 3 (0 units)**
Intermediate level English as a Second Language multi-skill course for students who have previous English instruction. Includes listening/speaking, writing, grammar review, and vocabulary development. **Recommended:** Qualification by CASAS assessment process or successful completion of ENSL B302N. **Hours:** 120 lect/disc. **Repeat:** As needed. **CCS:** Precollegiate basic skills. **Not Transferable:** Not degree applicable.

**ENSL B304N Field Level 4 (0 units)**
High-intermediate level English as a Second Language multi-skill course for students with previous English instruction. Focuses on grammar review, listening/speaking, writing, and vocabulary development. **Recommended:** Qualification by CASAS assessment process or successful completion of ENSL B303N. **Hours:** 120 lect/disc. **Repeat:** As needed. **CCS:** Precollegiate basic skills. **Not Transferable:** Not degree applicable.

**ENVIRONMENTAL HORTICULTURE**
See Agriculture

**FIRE TECHNOLOGY**
*Credit limitations may apply. For specific information see a counselor or the transfer institution. Visit the Fire Technology website at http://www2.bakersfieldcollege.edu/firetech/*

**FIRE B1 Fire Protection Organization (3 units)**
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 offering 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. **Hours:** 54 lect. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only.

**FIRE B2 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 CPR and standard first aid. **Prerequisite:** Fire B1 with a grade of C or higher. **Hours:** 54 lect/disc. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only.

**FIRE B3 Fire Command, Strategy, Tactic (3 units)**
Fundamentals of fire department organization, management, and resources, and the use of those resources to control various emergencies. **Prerequisite:** FIRE B1 with a grade of C or higher. **Hours:** 54 lect/disc/demo. Field trip required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only.

**FIRE B4 Fire Behavior and Combustion (3 units)**
Theory and fundamentals of how and why fires start, spread and are controlled; an in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents, and fire control techniques. **Prerequisite:** FIRE B1 with a grade of C or higher. **Hours:** 54 lect/disc/demo. Field trips required. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only.

**FIRE B5 Fire Prevention Technology (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 relationships of fire prevention systems, fire investigation and fire safety education. Provides skills necessary for California Fire Service Training and Education System, Certified Firefighter I and Fire Inspector I. **Prerequisite:** FIRE B1 with a grade of C or higher. **Hours:** 54 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only.

**FIRE B6 Fire Protection Equipment and Systems (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 with a grade of C or higher. **Hours:** 54 lect. **Offered:** S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges.

**FIRE B7 Building Construction for Fire Protection (3 units)**
The study of the components of building construction that relate to fire/life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at fires/collapse emergencies. The development and evolution of building and fire codes will be studied in relationship to past fires/collapses in residential, commercial, and industrial occupancies. **Prerequisite:** Fire B1 with a grade of C or higher. **Hours:** 54 lect. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. Note: Elective credit only.
FIRE B25a Wildland Fire Behavior (3 units)
Provides the knowledge to understand wildland fire behavior at the supervisory level in the Incident Command System. Conforms to curriculum requirements of the National Wildfire Coordinating Group. Includes but is not limited to the material contained in S-290 Intermediate Fire Behavior. Hours: 54 lect. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

FIRE B25b Wildland Firefighter Safety and Survival (3 units)
Study of factors that lead to unsafe working conditions in wildland fire fighting and procedures to limit risk. Emphasis is placed on avoiding situations and conditions which have resulted in fire shelter deployments, injuries, and fatalities. The Ten Standard Fire Orders and the Eighteen Situations that Shout Watch Out are studied in detail. Course meets National Wildfire Coordinating Group curriculum criteria. Prepares students for employment with wildland fire management agencies and municipal fire departments. Hours: 54 lect. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

FIRE B25c Wildland Fire Operations (3 units)
Presents the command structure and operational process for ground and air operations in the control of wildland fires. Fixed wing aircraft and helicopters are discussed. Includes interagency relationships, mobilization, trainee assignments, and the incident assignment kit. Course meets National Wildfire Coordinating Group curriculum criteria. Prepares students for employment with wildland fire management agencies and municipal fire departments. Hours: 54 lect. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

FIRE B25d Wildland Public Information Officer, Prevention, and Investigation (3 units)
Presents the information necessary to understand the roles and functions of the Wildland Fire Information Officer, Wildland Fire Prevention Officer, and Wildland Fire Investigation Officer. Hours: 54 lect. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

FIRE B25e Wildland Fire Logistics, Finance and Planning (3 units)
Explains the roles, responsibilities, and functions of the planning, logistics, and finance sections that are utilized during the control of wildland fires. Meets National Wildfire Coordinating Group curriculum criteria. Prepares students for employment with wildland fire management agencies and municipal fire departments. Hours: 54 lect. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

FIRE B25f Wildland Firefighter (4 units)
Provides basic principles of wildland fire control. Prepares the student for entry level employment on a wildland handtool fire crew. Meets the basic requirements for the U.S. Forest Service firefighter qualification system. Intended for students to pursue a career with a wildland fire suppression agency or for a specialty with a municipal fire control agency. Hours: 74 lect, 16 lab. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

FIRE B25g Wildland Engine Firefighter (3 units)
Prepares students to perform the duties of a wildland firefighter assigned to an engine company. Includes hoselays, types of attack with engines, backfiring equipment, hand tools, self contained breathing apparatus, map reading and communications. Includes National Wildfire Coordinating Group curriculum. Prepares students for employment with wildland fire management agencies and municipal fire departments. Hours: 54 lect. 26 lab. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

FIRE B25h Wildland Fire Dispatcher (3 units)
Provides the skills to perform entry level tasks within an all risk emergency dispatch system. Includes D-105 Entry Level Dispatcher, D-110 Dispatch Recorder, and D-310 Dispatch Supporter. Subjects covered include: communications, logs and filing, maps, resource status, dispatching aircraft, processing weather, first response/initial attack dispatching, support for initial attack, expanded dispatch, demobilization, accident/ incident reporting, public information, resource order and process, forms and associated processes, and intelligence processing. Utilizes National Wildfire Coordinating Group curriculum. Prepares students for employment with wildland fire management agencies and municipal fire departments. Hours: 54 lect. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

FIRE B26a Initial Attack Incident Commander Type 4 (ICT4) (S-200) (1 unit)
Prepares the student to function as an initial attack incident commander at the ICT4 level in the Incident Command System. Includes preparation, mobilization, size up, leading the initial attack, and initial attack strategy. Meets National Wildfire Coordinating Group curriculum criteria. Prepares students for employment with wildland fire management agencies and municipal fire departments. Hours: 16 lect. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

FIRE B26d Interagency Incident Business Management (S-260) (1 unit)
Provides knowledge to perform the tasks of the position in the Incident Command System (ICS) for which basic incident business management is required. Provides policy and direction for incident business management. Intended for students to pursue a career with a wildland fire suppression agency or for a specialty with a municipal fire control agency. Hours: 16 lect. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.
FIRE B26e Fire Operations in the Wildland/Urban Interface (S-215) (1.5 units)
Designed to meet the training needs for incident commanders (Type 4), strike team leaders, and company officers confronting wildland fire that threatens life, property, and improvements in the wildland urban interface. Course meets National Wildfire Coordinating Group curriculum criteria. Prepares students for employment with wildland fire management agencies and municipal fire departments. **Hours:** 32 lect. **Transferable:** CSU and private colleges. Note: Elective credit only.

FIRE B26g Crew Boss (S-230) (1.5 units)
Provides the knowledge to perform as a crew boss on a wildfire incident. Meets National Wildfire Coordinating Group curriculum criteria. Prepares students for employment with wildland fire management agencies and municipal fire departments. **Hours:** 32 lect. **Transferable:** CSU and private colleges. Note: Elective credit only.

FIRE B26k Field Observer (S-244) (1 unit)
Prepares the student to perform the duties of a Field Observer within the Incident Command System. Meets National Wildfire Coordinating Group curriculum criteria. Prepares students for employment with wildland fire management agencies and municipal fire departments. **Hours:** 20 lect. **Transferable:** CSU and private colleges. Note: Elective credit only.

FIRE B26m Display Processor (S-245) (0.5 unit)
Prepares the student to perform the duties of the Display Processor within the Incident Command System. Meets National Wildfire Coordinating Group curriculum criteria. Prepares students for employment with wildland fire management agencies and municipal fire departments. **Hours:** 8 lect. **Transferable:** CSU and private colleges. Note: Elective credit only.

FIRE B27a Basic Incident Command System (I-200) (1 unit)
Provides the basic features of the Incident Command System. Topics include orientation, principles and features, organization, incident fatalities, incident resources, and common responsibilities. Intended for students to pursue a career with a wildland fire suppression agency or for a specialty with a municipal fire control agency. **Hours:** 16 lect. **Transferable:** CSU and private colleges. Note: Elective credit only.

FIRE B27b Incident Command System (I-300) (1.5 units)
Provides description and detail of the organization and operation of the ICS. Covers management of resources, duties of all positions including the Air Operations Organization, and examples of how the essential principles are used in incident and event planning. Meets the curriculum requirements of the National Wildfire Coordinating Group. Applicable to wildland fire management agencies and municipal fire departments. **Hours:** 27 lect. **Transferable:** CSU and private colleges. Note: Elective credit only.

FIRE B28b Followership to Leadership (L-280) (0.5 unit)
Provides the student with leadership skills specific to wildland firefighting. Meets National Wildfire Coordinating Group curriculum criteria. Prepares students for employment with wildland fire management agencies and municipal fire departments. Includes classroom and field exercises. **Hours:** 8 lect, 8 lab. **Transferable:** CSU and private colleges. Note: Elective credit only.

FIRE B29 Wildland Fire Chain Saws (S-212) (2 units)
Prepares students to become wildfire powersaw operators within the National Interagency Management System. Covers safety considerations, techniques of saw operation, maintenance, and repair. Wildland Fire Chain Saws (S-212) is identified training in the National Wildfire Coordinating Group Suppression curriculum. Intended for students to pursue a career with a wildland fire management agency or for a specialty with a municipal fire control agency. **Hours:** 32 lect. **Transferable:** CSU and private colleges. Note: Elective credit only.

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 with a grade of C or higher. **Hours:** 40 lect. **Offered:** F, S, SS. **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 with a grade of C or higher or equivalent. **Hours:** 40 lect/disc. **Offered:** F, S, SS. **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
with a grade of C or higher. **Hours:** 27 lect, 13 lab. **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 with a grade of C or higher or equivalent. **Hours:** 36 lect, 4 lab. **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 with a grade of C or higher or equivalent. **Hours:** 36 lect, 4 lab. **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 with a grade of C or higher. **Hours:** 36 lect, 4 lab. **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:** 18 lect, 22 lab. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree 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 with a grade of C or higher. **Hours:** 36 lect, 4 lab. **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 with a grade of C or higher. **Hours:** 40 lect/disc. **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 with a grade of C or higher or equivalent. **Hours:** 40 lect/disc. **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 with a grade of C or higher or equivalent. **Hours:** 36 lect/disc. **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 with a grade of C or higher. **Hours:** 36 lect. **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 with a grade of C or higher or equivalent. **Hours:** 36 lect. **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 with a grade of C or higher. **Hours:** 40 lect/disc. **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 with a grade of C or higher or equivalent. **Hours:** 40 lect. **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 with a grade of C or higher. **Hours:** 36 lect, 4 lab. **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 with a grade of C or higher. **Hours:** 36 lect, 4 lab. **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 B51e with a grade of C or higher. **Hours:** 36 lect/disc. **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 with a grade of C or higher. **Hours:** 40 lect/disc. **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 pumper field equations. **Recommended:** MATH B50 or equivalent with a grade of C or better. **Hours:** 36 lect. **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 with a grade of C or better. **Hours:** 64 lect, 64 lab. **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:** 54 lect, 66 lab. **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 with a grade of C or better. **Hours:** 144 lect, 176 lab. **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 with a grade of C or better. **Hours:** 235 lect/lab. Field trips required. **Offered:** F, S, SS. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
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; communications; personal health issues; and emergency rescue techniques. Hours: 52 lect, 104 lab. 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 lect/lab. Repeat: Unlimited. CCS: Occupational Education. Not Transferable: Not degree applicable.

FIRE B67 Emergency Telecommunicator (3 units)
Designed to provide students with a clearer understanding about being a professional telecommunicator and help transfer that knowledge into positive actions that will assist callers and help bring each call to its best conclusion. Emphasizes decision making, the act of dispatching, interacting with various types of public service agencies, personnel, and different organizational structures. Hours: 54 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

FIRE B68 Emergency Medical Dispatch (3 units)
Designed to provide the dispatcher with information, training and experience in providing prearrival instructions over the telephone in medical emergency situations. Emphasizes decision making in a non-visual environment, the act of working in concert with a reporting party to help mitigate a medical emergency until trained medical personnel arrive on scene. Instructs the student in the authority, personnel, organizational structure and their role in the emergency medical environment. Hours: 54 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

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 with a grade of C or better. Hours: 18 lect, 18 lab. 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 lect/demo. 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 lect/demo. 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: 18 lect, 22 lab. 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 lect. 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 lect. 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 lect. 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 lect/demo. 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 lect/demo. Offered: F, S, SS. CCS: Occupational Education. Not Transferable: Not degree applicable.

FIRE B71a Seasonal Firefighter Basic Training 1 (2 units)
This is the same information/course presented to all first year wildland firefighters. All of the federal fire agencies and many municipal fire departments recognize this course as the foundation to all subsequent fire training. This is “The Basics” it will provide students with an understanding of wildland firefighting principals, tactics, organization, and fireline safety. Hours: 9 lect, 31 lab. Offered: F, S. CCS: Occupational Education. Not Transferable: Not degree applicable.

FIRE B71b Seasonal Firefighter Basic Training 2 (1.5 units)

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 lect/disc. Offered: F, S, SS. CCS: Occupational Education. Not Transferable: Not degree applicable.

FIRE B72abc Heavy Duty Rescue 1-2-3 (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 with a grade of C or better. Hours: 72a: 18 lect/lab for 0.5 unit; 72b: 36 lect/lab for 0.5 unit; 72c: 54 lect/lab for 1 unit. 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: 18 lect, 12 lab. 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 with a grade of C or better. Hours: 20 lect/manipulative exercises. Field trips required. Offered: F, S, SS. CCS: Occupational Education. Not Transferable: Not degree applicable.

FIRE B72f Auto Extrication (0.5 unit)

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 with a grade of C or better. Hours: 18 lect, 18 lab. Field trips required. Repeat: 3. Offered: F, S, SS. CCS:
COURSE DESCRIPTIONS

FIRE TECHNOLOGY

Occupational Education. Not Transferable: Not degree applicable.

FIRE B72h Emergency Medical Technician 1 (4 units)
Designed to certify students as California State Emergency Medical Technicians and gain employment as a Firefighter or ambulance driver or ambulance attendant or law enforcement officer. After successful completion of this course, students will be authorized to take the Kern County EMS, California State Fire Marshal and or the National Registry EMT examinations. Topics discussed include pre-hospital care terminology, cardiovascular emergencies, pre-hospital childbirth, communicable disease, extrication tools and equipment, automatic external defibrillation and an understanding of the emergency medical system. Course content is based on the guidelines and authority of Title 22, Division 9 of the California Code of Regulations, as well as the U.S. Department of Transportation Emergency Medical Technician-Based Standard National Curriculum, National Registry EMT Examinations. Students must be 18 years of age and have a current CPR card (Title 22, Division 9 of the California Code of Regulations). Students are responsible for paying any certification fees. Recommended: FIRE B1 with a grade of C or better. Hours: 68 lect, 72 lab. Field trips required. Offered: F, S, SS. CCS: Occupational Education. Not Transferable: Not degree applicable.

FIRE B72i Emergency Medical Technician 1 Refresher (1 unit)

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 with a grade of C or better. Hours: 3 lect, 6 lab manipulative exercises. Repeat: 1. Offered: F, S, SS. CCS: Occupational Education. Not Transferable: Not degree applicable.

FIRE B75 Fire Fighting Techniques (0.5 unit)

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 with a grade of C or better. Hours: 9-36 lect/lab. Offered: F, S, SS. CCS: Occupational Education. Not Transferable: Not degree applicable.

FIRE B78 Advanced Officer Training (0.5 unit)

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 with a grade of C or better. Hours: 9-24 lect/lab. 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 with a grade of C or better. Hours: 9-24 lect/disc. 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)

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 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.


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

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 I-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 B84t ICS-S-213 Dozer Boss

FIRE B84u ICS-I 330 Strike Team/Task Force Leader

FIRE B84v ICS-5331 Crew Representative

FIRE B85 Special Topics (0.5-3 units)

FDSV B50 Introduction to the Foodservice Industry (2 units)
An introduction to the foodservice industry including history, trends, organization and job opportunities. Entry level skills to be taught include communication techniques, terminology, work simplification, application of computational skills,
COURSE DESCRIPTIONS

FOOD SERVICE

FDSV B51 Food and Nutrition Orientation (0.5 unit)
Provides a basic understanding of professional standards used in food service industry as well as orientation to the kitchen equipment, storage practices and the use of a recipe. Covers skills development for organizational skills, time management and goal setting. Preparations for the construction of student projects and portfolios are included. Recommended: Reading - 1 level prior to transfer. Hours: 36 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 Educational Foundation of the National Restaurant Association. Recommended: Reading - 1 level prior to transfer. Hours: 36 lect/disc. Repeat: 2. Field trips may be required. Offered: F, S. CCS: Occupational Education. Not Transferable: Associate Degree only.

FDSV B55a Foodservice Production Theory 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, salads, potatoes and starches. Hours: 45 lect. Field trips may be required. Repeat: 2. Offered: F, S. CCS: Occupational Education. Not Transferable: Associate Degree only.

FDSV B55b Foodservice Production Theory II (2.5 units)
Basic principles and techniques involved in commercial and non-commercial food production. Emphasizes nutritional standards, equipment use, and sanitation/safety principles. Cookery principles relating to poultry, fish and shellfish, sandwiches, hors d’oeuvres, breakfast cookery, vegetarian cookery, food presentation and garde manger. Recommended: Reading - 1 level prior to transfer. Hours: 45 lect. Field trips may be required. Offered: F, S. CCS: Occupational Education. Not Transferable: Associate Degree only.

FDSV B55c Foodservice Production Laboratory I (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: FDSV B55a or B55b with a grade of “C” or better (may be taken concurrently). Recommended: Reading - 1 level prior to transfer. Hours: 108 lab. Field trips may be required. Offered: F, S. CCS: Occupational Education. Not Transferable: Associate Degree only.

FDSV B55d Foodservice Production Laboratory II (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: FDSV B55a or B55b with a grade of “C” or better (may be taken concurrently) Recommended: Reading - 1 level prior to transfer. Hours: 108 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 the instructor. Prerequisite: FDSV B52, B55a, B55b, B55c and B59 with a grade of C or better. Recommended: Reading - 1 level prior to transfer. Hours: 18 disc/ seminar and 108 practicum. Field trips may be required. CCS: Occupational Education. Not Transferable: Associate Degree only.

FDSV B55f Fundamentals of Baking (2 units)
Advanced baking experience in the production of cakes, basic creams, icings, dessert sauces, doughnuts, crepes, tarts, puff pastry, eclairs, meringues, Petit Fours and specialty cookies. Decorative work and display pieces, product presentation and marketing techniques demonstrated. Recommended: Reading - 1 level prior to transfer. Hours: 108 lab. Field trips may be required. Repeat: 2. Offered: F, S. CCS: Occupational Education. Not Transferable: Associate Degree only.

FDSV B55i Food and Nutrition Internship (1 unit)
Advanced practicum application of required knowledge, skills, work ethics and technology in developing a broader understanding of the food service industry. Off campus work internship under supervision of a foodservice professional. Practicum sites must be approved by the instructor. This course emphasizes integrating theory with practical foodservice applications. Participation criteria may vary among the
participating foodservice professional organizations. Uniform is required. Transportation provided by the student. **Prerequisite:** FDSV B52, B55a, B55b, B55c, B55d, B59 with a grade of C or better. **Recommended:** NUTR B10 with a grade of C or better, Reading - 1 level prior to transfer. **Hours:** 18 disc/semester and 60 unpaid or 75 paid practicum. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**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 - 1 level prior to transfer and recommendation by faculty member. **Hours:** 18 seminar. **Repeat:** 1, not to exceed 2 units. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**FDSV B59 Food Service Production Management (3 units)**
Emphasizes basic knowledge of the first-line hospitality supervisor’s roles and responsibilities. Principles of good people management are presented in how they apply to the job. Food purchasing activities for food service operations and product information from a management’s perspective are discussed in relation to supervisory roles. Basic principles of cost control are discussed along with applications of basic accounting procedures to cost controls and profitability. **Prerequisite:** FDSV B50, FDSV B52, and FDSV B55a or FDSV B55b with a grade of C or better or all may be taken concurrently. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect. 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 - 1 level prior to transfer. **Hours:** 54 lect/disc. Field trips may be required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**FDSV B64a Dietetic Service Supervisor Practicum (2 units)**
Roles and responsibilities of the Dietetic Service Supervisor in health care and community foodservice operations. Application of standards, principles and techniques of basic nutrition, modified diets, nutrition education, data gathering and patient/staff communications. Course provides 120 hours directed unpaid clinical work experience in an approved health care facility. (50 hours may be in a facility in which the student is employed). **Prerequisite:** NUTR B10 and NUTR B50 with a grade of C or better. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 120 directed field work experience. 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 requirements of California legislation effective January 1, 2000. A Certificate of Sanitation is awarded from the Educational Foundation of the National Restaurant Association upon passing the required exam. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 9 lect/disc. **Repeat:** Unlimited. 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.

**FORESTRY**
See Agriculture

**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 - 1 level prior to transfer. **Hours:** 90 lect. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 3.B, 6.

**FREN B2 Elementary French (4 units)**
Continued 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 with a grade of C or better or two years of high school French. **Hours:** 72 lect. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 3.B, 6.

**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 with a grade of C or better, three years of high school French or evaluation by instructor of student’s French skills. **Hours:** 72 lect. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 3.B, 6.
FRENCH

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 with a grade of C or better or four years of high school French or evaluation by instructor of student’s French skills. **Hours:** 72 lect. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C.1; CSU GE C.2; IGETC 3B. 6.

GEography

GEOG B1 Physical Elements of Geography (3 units)
A study of the basic elements of physical geography and the world as a system. Important elements include the atmosphere, weather and climate, geomorphology, and Earth’s structure. The main goal of the course is to provide students with a greater understanding and appreciation for their physical environment, with special attention given to terrestrial relationships. **Recommended:** Reading - 1 Level prior to transfer. **Hours:** 54 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE B.1; CSU GE B.1; IGETC 5.A.

GEOG B1L Physical Geography Laboratory (1 unit)
The laboratory portion of Physical Geography is designed to demonstrate how material presented in GEOG B1 can be applied in a working environment. The assignments are designed to help students understand and apply the concepts learned in the lecture to real world problems. Exercises include using an atlas, coordinate systems, earth-sun relationships, weather and climate analysis, and topographic map interpretation. **Prerequisite:** GEOG B1 with a grade of C or better (may be taken concurrently). **Recommended:** Reading - 1 Level prior to transfer. **Hours:** 54 lab. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE B.1; CSU GE B.1; B.3; IGETC 5.A.

GEOG B2 Human Geography (3 units)
Human Geography is designed to demonstrate how people interact culturally with their environment. Special emphasis will be placed on concepts such as population, movement, cultures, and civilizations. Economic factors affecting people’s lives and religion will also be emphasized. **Recommended:** Reading - 1 Level prior to transfer. **Hours:** 54 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. BC GE B.1; CSU GE B.1; D.5; IGETC 4.

GEOG B3 Introduction to Weather and Climate (3 units)
Introduction to Weather and Climate focuses on changes in weather and climate patterns throughout the world. Special emphasis will be given to atmospheric phenomena such as El Nino, hurricanes, tornadoes, and weather mapping. In addition, atmospheric forces such as pressure gradient and coriolis force will be discussed in detail. **Recommended:** Reading - 1 Level prior to transfer. **Hours:** 54 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. BC GE B.1, CSU B.1, D.5; IGETC 4.

GEOL 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 requiring laboratory experience should enroll in GEOL B10L concurrently with GEOL B10. **Prerequisite:** Reading - 1 Level prior to transfer. **Hours:** 54 lect. At least one Saturday field trip or equivalent required. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken GEOL B1a. BC GE B.1; CSU GE B.1; IGETC 5.A.

GEOL B10L Introduction to Geology Laboratory (1 unit)
Exercises planned to accompany the lectures of GEOL B10. Identification of rocks and minerals, topographic and geographic map exercises demonstrating the work of water, wind, ice and gravity and effects of volcanism and earthquakes. **Prerequisite:** GEOL B10 with a grade of C or better (may be taken concurrently). **Hours:** 54 lab. Field trips required. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE B.1; CSU GE B.1; B.3; IGETC 5.A.

GEOL B11 Historical Geology (3 units)
An introduction to the formation and development through time of the solid Earth, atmosphere and biosphere. Covers past movements and locations of the continents and interpretation of past environments as recorded in rock and fossil records, including the dinosaurs. Students requiring laboratory experience should enroll in GEOL B11L concurrently with GEOL B11. **Prerequisite:** Reading - 1 Level prior to transfer. **Hours:** 54 lect. At least one Saturday field trip or equivalent required. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. BC GE B.1, CSU B.1, IGETC 5.A.

GEOL B11L Historical Geology Laboratory (1 unit)
Exercises planned to accompany the lectures of GEOL B11. Identification and description of sedimentary rocks and fossils. Stratigraphic section, relative dating, and geologic map exercises. **Prerequisite:** GEOL B11L concurrently with GEOL B11. **Prerequisite:** Reading - 1 Level prior to transfer. **Hours:** 54 lab. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. BC GE B.1, CSU B.1, IGETC 5.A.

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 or ERSC B10 with a grade of C or better. Reading - 1 Level prior to transfer. **Hours:** 54 lect. A Saturday field trip or...
equivalent may also be required. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

**GEOB B21 Topics in Geology (1-3 units)**
An introductory study of the various geological processes that shape the Earth. For each class offering students will focus on one particular area of geology, such as structures and earthquakes, rocks and minerals, geology of Sequoia National Park, geology of Joshua Tree National Park, geology of Death Valley, geology of Yosemite National Park, or other similar subjects. Students will learn about the processes and forces that created these areas and be able to apply their knowledge and understanding to other geological formations around the world. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 18 per unit. Field trips required. **Repeat:** 3. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges.

**GEOB 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 field relationships of various rocks and the beginning of a collection of rock and mineral specimens. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 18 lect/lab. Field trip required. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. **Note:** elective credit only.

**GEOB 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 that will permit the examination and recognition of different geological environments. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 18 lect/lab. Field trip required. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. **Note:** elective credit only.

**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 with a grade of C or better. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 90 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **BC GE C; CSU GE C.2; IGETC 3.B, 6.**

**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 with a grade of C or better or two years of high school German. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 90 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **BC GE C; CSU GE C.2; IGETC 3.B, 6.**

**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 - 1 level prior to transfer. **Hours:** 54 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **BC GE E; CSU GE E.**

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

**HIST B1 World History from the Origins of Civilizations to 1500 (3 units)**
Survey of the historical development of different world societies’ major economic, intellectual, political, religious, cultural and social ideas and institutions from Paleolithic humanity to the Early Modern Era. **Recommended:** ENGL B50/ENSL B50 and Writing and Reading - 1 level prior to transfer. **Hours:** 54 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. **BC GE D.2, CSU GE C.2, D.6; IGETC 3.B, 4.F.**

**HIST B2 History of the World Since 1500 (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. **Recommended:** ENGL B50 and Reading - 1 level prior to transfer. **Hours:** 54 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. **BC GE D.2; CSU GE D.6; IGETC 3.B, 4.**

**HIST B3 Modern Global Societies (3 units)**
A comparative global history of the modern world through an examination of the different economic, intellectual, political, religious, cultural and social ideas and institutions of diverse world societies as they adapted to the modern world. Includes
HIST B15 Civilizations of the Middle East (3 units)
An introduction to the history and culture of the Middle East from the rise of Islam in the 7th century to the present. Includes the study of government, family, social classes, religion, politics, and conflict in the region. Recommended: Reading - 1 level prior to transfer. Hours: 54 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges. BC GE D.2, D.3; CSU GE D.6; IGETC 3.B, 4.F.

HIST B17a History of the United States (3 units)
Survey of the political, economic and cultural history of the United States from earliest colonial times to 1877. Includes a study of the U.S. Constitution and federal government. Partially satisfies the requirements in U.S. Constitution, American history and institutions. HIST B17a is not a prerequisite for HIST B17b. Recommended: ENGL B50 or Reading and Writing - 1 level prior to transfer. Hours: 54 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges. BC GE D.2, D.3; CSU GE D.6; IGETC 3.B, 4.

HIST B17b History of the United States Since 1870 (3 units)
Survey of the political, economic and cultural history of the United States from Reconstruction to the present. Includes a study of the U.S. Constitution and federal government, local government of California. Partially satisfies the requirements in U.S. Constitution, American history and institutions. HIST B17 is not a prerequisite to HIST B17b. Recommended: ENGL B50 or Reading and Writing - 1 level prior to transfer. Hours: 54 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges. BC GE D.2, D.3; CSU GE D.6; IGETC 3.B, 4.

HIST B18 History of California (3 units)
The social, economic, and political development of California from its pre-European past to its post-industrial present. Examines the historical uniqueness of California’s environment, population, institutions, and economy. Emphasis placed on the influence of American political thought and institutions in the historical evolution of California’s state and local governments. Partially satisfies the requirements in U.S. Constitution, American history and institutions. Recommended: Writing and Reading - 1 level prior to transfer. Hours: 54 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges. BC GE D.2, D.3; CSU GE C.2, D.6; IGETC 3B, 4.

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. Partially satisfies the requirements in U.S. Constitution, American history and Institutions. Recommended: Eligibility for ENGL B50 and Reading - 1 level prior to transfer. HIST B20a is not a prerequisite for HIST B20b. Hours: 54 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges. BC GE D.2, D.3; CSU GE D.6; IGETC 3.B, 4.

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 federal government. Partially satisfies the requirements in U.S. Constitution, American history and institutions. HIST B17 is not a prerequisite for HIST B17b. Recommended: Eligibility for ENGL B50 and Reading and Writing - 1 level prior to transfer. HIST B20a is not a prerequisite for HIST B20b. Hours: 54 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges. BC GE D.2, D.3; CSU GE D.6; IGETC 3.B, 4.

HIST B25 Introduction to Women in American History (3 units)
Survey of the history of women in America from the pre-colonial period to the present. Emphasis is on the social, economic, political, and multicultural facets of women’s history in the U.S. and includes both the commonalities and diversities of women’s roles, the use of gender as an analytic category, and the specific significance of women in the evolution of the major contours of U.S. history. Recommended: Writing - One
level prior to transfer and Reading - 1 level prior to transfer.  
**Hours:** 54 lect.  
**CCS:** Liberal Arts and Sciences.  
**Transferable:** UC, CSU and private colleges.  
**BC GE D.2; CSU GE D.4, D.6; IGETC 3.B, 4.**

**HIST 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. Partially satisfies the requirements in U.S. Constitution, American history and institutions.  
**Recommended:** Reading - 1 Level prior to transfer.  
**Hours:** 54 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.  
**BC GE D.2; CSU GE D.3, D.6; IGETC 3.B, 4.**

**HIST B30b History of Chicanos in the Southwest (3 units)**  
Survey of the Chicanos and the United States with an emphasis on the developments in California and the Southwest from 1848 to the present: relationship of regions within the U.S. area, roles of major ethnic groups, continuity of American experience, derivation from other cultures, aftermath of the U.S. Mexican War, interrelationship of Mexican and U.S. history between 1860 and 1910; effects of Mexican Revolution on the 20th century experience of Chicanos, California State Constitution. Partially satisfies the requirements in U.S. Constitution, American history and institutions.  
**Recommended:** Eligibility for English B50 and Reading - 1 Level prior to transfer.  
**Hours:** 54 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.  
**BC GE D.3; CSU GE D.3, D.6; IGETC 3.B, 4.**

**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 and Portuguese colonial systems 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 B50 and Reading - 1 level prior to transfer.  
**Hours:** 54 lect.  
**CCS:** Liberal Arts and Sciences.  
**Transferable:** UC, CSU and private colleges.  
**Note:** Not open to students who have taken the equivalent course, CHST B33.  
**BC GE D.2, D.3; CSU GE D.3, D.6; IGETC 3.B, 4.**

**HIST B36 History of Native American Indians (3 units)**  
Survey of the origins, traditions, lifeway and belief systems of various Native American communities. Emphasis on socio-political encounters with Anglo American expansion and indigenous resilience. Partially satisfies the requirements in U.S. Constitution, American history and Institutions.  
**Recommended:** Eligibility for English B50 and Reading - 1 Level below transfer.  
**Hours:** 54 lect.  
**CCS:** Liberal Arts & Sciences.  
**Transferable:** UC, CSU and private colleges.  
**Note:** Offered only occasionally.  
**BC GE D.2, D.3; CSU GE D.3, D.6; IGETC 3.B, 4.**

**HORTICULTURE**  
See Agriculture

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

**HMSV B5 Human Services Internship (2 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 Program Coordinator is required to register for this class.  
**Prerequisite:** HMSV B40 with a grade of “C” or better.  
**Recommended:** Not open to students who have completed HMSV B40, attend a mandatory orientation, and obtain the signature of the Human Services Program Coordinator before enrolling.  
**Recommended:** Reading and Writing - 1 level prior to transfer.  
**Hours:** Eligible interns may take two units per semester until a total of four units (216 hours of field work) has been completed. Two units equal 18 hours seminar and 108 hours field work.  
**Repeat:** 1.  
**Offered:** F, S, SS.  
**CCS:** Occupational Education.  
**Transferable:** CSU and private colleges.

**HMSV B40 Introduction to Human Services (3 units)**  
Survey of helping institutions and social issues concerning human services; including target populations; survey of human services careers; historical, ethical, and theoretical perspectives of social and public policy; current controversies concerning human services; institutional and community-based services; diversity; models of service delivery; helping process techniques and skills.  
**Recommended:** Reading - 1 level prior to transfer.  
**Hours:** 54 lect.  
**Offered:** F, S, SS.  
**CCS:** Occupational Education.  
**Transferable:** CSU and private colleges.  
**Note:** Elective credit only.

**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 and engineering drawings. Emphasizes basic drafting skills.  
**Recommended:** Reading - 1 level prior to transfer.  
**Hours:** 18 lect, 18 lab.  
**Offered:** F, S, SS.  
**CCS:** Occupational Education.  
**Transferable:** CSU and private colleges.

**INDR B11 Introduction to Computer Aided Drafting and Design (CAD) (1 unit)**  
An introductory course utilizing a computer aided drafting (CAD) system to obtain graphic solutions, design, modifications and delineations for industrial, architectural and engineering drawings. Emphasizes building skills
INDR B20a Computer Aided Drafting and Design (CAD) (3 units)
An intensive course utilizing a computer aided design (CAD) system to obtain graphic solutions, design refinements, modifications and delineations in both 2D and 3D for industrial, architectural and engineering drawings. Emphasizes technology skills that are necessary to function as an entry-level CAD operator. Prerequisite: INDR B10 and INDR B11 with a grade of C or better or equivalent experience to be evaluated by the instructor. Recommended: Reading - 1 level prior to transfer. Hours: 54 lect, 54 lab. CCS: Occupational Education. Transferable: CSU and private colleges.

INDR B20b Computer Aided Drafting and Design (CAD) (3 units)
A continuation of the sequence utilizing a computer aided design (CAD) system to obtain graphic solutions, design refinements, modifications and delineations in both 2D and 3D for industrial, architectural and engineering drawings. Emphasizes technology skills that are necessary to function as an entry-level CAD operator. Prerequisite: INDR B20a with a grade of C or better. Recommended: Reading - 1 level prior to transfer. Hours: 54 lect, 54 lab. Field trips required. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

INDR B40 Parametric Modeling Fundamentals (3 units)
Basic and advanced parametric modeling techniques to create three-dimensional models of mechanical objects, then use these models to generate two-dimensional drawings (including views, sections, details, and dimensions) as well as assembly drawings (technical illustrations) and animations. Recommended: INDR B10 and B11 with a grade of C or better. Hours: 36 lect. 72 lab. Offered: F, S, SS. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

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 with a grade of C or better. Hours: 54 lect, 54 lab. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges. Not Transferable: Associate Degree only.

INDR B51 Electrical Design (3 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 with a grade of C or better or two years of high school drafting with a grade of ‘B’ or ELET B2. Recommended: Reading - 1 level prior to transfer. , INDR B11 with a grade of C or better. Hours: 36 lect, 72 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 with a grade of C or better. Hours: 36 lect, 72 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

INDT B5 Architectural Woodworking and Design (1 unit)
Students will complete an architectural woodworking project of their own design including conceptual drawings of the design. Emphasis is on woodworking lab safety. Covers the incorporation of woodworking joinery. Prerequisite: ARCH B6 with a grade of C or better (may be concurrently enrolled). Hours: 9 lect, 27 lab. CCS: Occupational Education. Transferable: CSU and private colleges.

INDT B10 Occupational Readiness (3 units)
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. Hours: 9 lect, 27 lab. Offered: F, S. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.

INDT B51 Introduction to Industrial Maintenance (6 units)
Introduction to tools, processes, safety requirements, computations, and basic maintenance and service requirements for equipment and situations commonly found in industrial sites. Hours: 72 lect, 108 lab. 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 - 1 level

BAKERSFIELD COLLEGE COURSE DESCRIPTIONS

INDUSTRIAL DRAWING

BAKERSFIELD COLLEGE COURSE DESCRIPTIONS

INDUSTRIAL TECHNOLOGY

CREDIT LIMITATIONS MAY APPLY. FOR SPECIFIC INFORMATION SEE A COUNSELOR OR THE TRANSFER INSTITUTION.
prior to transfer. Enrollment is contingent on available lab space. **Hours:** 36 hours by arrangement for 2 units; 54 hours by arrangement for 3 units. **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 hours by arrangement for 2 units; 54 hours by arrangement for 3 units. **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 hours by arrangement for each unit. **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)

Course is intended to provide students the ability to, on an independent study basis, the opportunity to explore various segments of the woodworking and cabinetmaking industry. The primary intent of this course is to develop and implement meaningful, self-directed studies in areas where the student desires specific technical and/or skill development.

**Recommended:** Concurrent enrollment in a woodworking technology related course or previous woodworking and/or cabinetmaking experience. **Hours:** 108 to 162 independent study. **Repeat:** 2 or until a limit of 6 units is reached. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

**INDT B275 Special Problems in Automotive/Motorcycle**

(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. Students must completed ‘Petition for Individual Study’ form. **Recommended:** Basic automotive knowledge. **Hours:** 36 hours by arrangement for 2 units; 54 hours by arrangement for 3 units. **Repeat:** 1 or until a limit of 6 units is reached. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

**INDT B277 Special Problems in Construction**

(1-3 units)

Provides students the opportunity to explore various segments of the construction industry. The primary intent of the course is to develop and implement meaningful self-directed studies in areas where the student desires specific technical and/or skill development. **Recommended:** Concurrent enrollment in a construction technology related course or previous construction experience. **Hours:** 48-144 independent study. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**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 composition while learning the characters of Japanese alphabets. Requires practice with audiotape/CD program outside of class. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 90 lect. **Offered:** S, F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 6.

**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/CD program outside of class. **Recommended:** JAPN B1 with a grade of C or better. **Hours:** 90 lect. **Offered:** S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 3.B. 6.

**JAPN B3 Elementary Japanese**

(5 units)

Provides further knowledge and communication skills in Japanese in all four areas: speaking, listening, reading, and writing. In addition to the polite/distal style, the course further develops oral communication skills in other speech styles such as directed style and honorific style. One hundred new kanji (Chinese characters) are introduced. **Prerequisite:** JAPN B2 with a grade of C or better. **Hours:** 90 lect. **CCS:** Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. BC GE C.
JAPN B52a Elementary Conversational Japanese (2 units)

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

JRNL B1 Media and Society (3 units)
A study and evaluation of mass media and how it shapes societies and cultures. The focus provides the media consumer with a historical and a theoretical perspective on newspapers, magazines, books, the Internet, television, radio, public relations, advertising and motion pictures. Course content discusses media law and ethics, controversial topics as well as topics of current interest. Recommended: Reading and Writing - 1 level prior to transfer. Hours: 54 lect. Field trips required. Offered: F, S. CCS: Occupational Education. Transferable: UC, CSU and private colleges. BC GE D.2; CSU GE D.8; IGETC 4.

JRNL B2 Beginning Reporting (3 units)
Introduction to journalism through the study of practical application of various techniques. Concentration on recognizing story ideas, gathering information from sources, news judgment, ethics, proper style and writing. Emphasizes news, features, sports and opinion writing. Prepares students for possible role on a student newspaper. Recommended: Reading and Writing - 1 level prior to transfer. Hours: 54 lect. Offered: F, S. CCS: Occupational Education. Transferable: CSU and private colleges.

JRNL B4 Introduction to Public Relations (3 units)
An introduction to public relations in today’s society, including history of public relations and study of definitions, processes, and audiences of businesses as well as nonprofit organizations. Includes how to prepare, write and submit news releases to electronic and print media. Recommended: JRNL B2 with a grade of C or better, Reading and Writing - 1 level prior to transfer. Hours: 54 lect. Field trips required. Offered: F, S. CCS: Occupational Education. Transferable: CSU and private colleges.

JRNL B15 Press Photography (3 units)
Study and application of digital photography as applied to journalism. Covers technical aspects of cameras, use of Photoshop, how to photograph assignments in the field and choosing photographs for print. Entry-level photojournalism course prepares students for enrollment in student newspaper. Important: Digital camera required. Recommended: Reading and Writing - 1 level prior to transfer. Hours: 36 lect, 54 lab. Offered: F, S. CCS: Occupational Education. Transferable: CSU and private colleges.

JRNL B16 Multimedia Reporting (3 units)
Study and application of photography applied to emerging changes in the journalism landscape, specifically visual and audio communication through new media. Emphasizes the combined use of still cameras, audio recording equipment and video cameras to produce in-depth, content-rich reporting for journalism Web sites. Recommended: JRNL B15 with a grade of C or better, Reading and Writing - 1 level prior to transfer. Hours: 36 lect, 54 lab. Offered: F, S. CCS: Occupational Education. Transferable: CSU and private colleges.

JRNL B26 Newspaper Production/Editors (4 units)
Designed for editors of the online and print editions of The Renegade Rip, BC’s award winning student-produced college newspaper. Teaches news content analysis, planning and evaluation using critical-thinking skills, story organization, intensive page design, planning and developing style and design of stories, photography, graphics, and art. Includes numerous discussions of ethics, collaboration with staff, and learning editorial leadership, with editors making all policy and content decisions for student-produced print and online media. Recommended: JRNL B2 with a grade of C or better; Reading and Writing - 1 level prior to transfer. Hours: 18 lect, 162 lab. Repeat: 3. Offered: F, S. CCS: Occupational Education. Transferable: CSU and private colleges.

JRNL B27a Newspaper Production/Reporters (3 units)
Production practicum for the print and online editions of The Renegade Rip, BC’s award-winning student-produced college newspaper. Offers experience in interviewing, research, news, feature, sports, and opinion reporting, design and production of editorial cartoons, headline writing, copyediting, proof reading, introduction to page design, graphics, and computer use. Students wishing to report stories, create editorial cartoons, or create graphics for the college newspaper should be enrolled. Recommended: JRNL B2 with a grade of C or better, Reading and Writing - 1 level prior to transfer. Hours: 18 lect, 108 lab. Repeat: 3. Offered: F, S. CCS: Occupational Education. Transferable: CSU and private colleges.

JRNL B27e Newspaper Production/Photographers (3 units)
Production practicum for the print and online editions of The Renegade Rip, BC’s award-winning student-produced college newspaper and its online edition. This course offers experience in how to take color news, feature, and sports photographs, black and white photo technology, photo editing and sizing photo essay design, photo polls, environmental portraits and photo illustrations. Students wishing to take photos for the college newspaper using digital should be enrolled. Recommended: JRNL B15 with a grade of C or better, Reading and Writing - 1 level prior to transfer. Hours: 18 lect, 108 lab. Repeat: 3. Offered: F, S. CCS: Occupational Education. Transferable: CSU and private colleges.
LIBRARY

LIBR B34 Introduction to Library Research (1 unit)
Lecture and hands-on research class which will develop a basic familiarity with libraries and information resources as a foundation for future research needs. Students will learn about different types of information resources, both in the Library and on the internet, and different search methods. Evaluation of resources, both print and electronic, is emphasized. 
Recommended: English Level 6. Hours: 18 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 ENGL B34.

LIBR B55 Information Competency (0 units)
Addresses specific areas of information competency. Assists students in gaining proficiency in all aspects of information competency including research strategies, using reference materials, searching the online catalog, locating journal and newspaper articles, evaluation of print and internet resources, using the internet and legal aspects of information (plagiarism, fair use, and copyright). Hours: 60 minutes per meeting. CCS: Liberal Arts and Sciences. Not Transferable: Not degree applicable.

MANAGEMENT
See Business Administration

MANUFACTURING/MACHINE TECHNOLOGY

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

MFGT B1ab Machine Tool Processes (3 units)
Machine tool technology including the use of precision measuring instruments, drilling machines, lathes and vertical milling machines. 
Recommended: Reading - 1 level prior to transfer. 
Transferable: CSU and private colleges. Note: Elective credit only.

MFGT B2 CNC Lathe Programming & Operation (3 units)
Set-up, operation, and programming of a computer numerical control lathe. 
Recommended: MFGT B1a with a grade of C or better or evaluation by the instructor of student’s machining skills; Reading - 1 level prior to transfer. 
Hours: 36 lect, 54 lab. Offered: F. Repeat: 1. CCS: Occupational Education. 
Transferable: CSU and private colleges. Note: Elective credit only.

MFGT B3 CNC Milling Programming (3 units)
Programming, set-up, and operation, of a computer numerical control milling machine. G-code programming is emphasized along with the use of CAD/CAM software. 
Recommended: MFGT B1ab with a grade of C or better; Reading - 1 level prior to transfer. 
Hours: 36 lect, 54 lab. Offered: S. Repeat: 1. CCS: Occupational Education. 
Transferable: CSU and private colleges. Note: Elective credit only.

MFGT B43L Machine Shop Essentials for Engineers and Designers Laboratory (1 unit)
A hands-on project-based overview of machine shop practices, introducing students to the use of machine tools and hand tools to manufacture a product from blueprints. Students will acquire basic metal forming skills through the use of lathes, milling machines, drill presses, and precision measuring tools. 
Hours: 54 lab. Offered: Spring, Summer. CCS: Occupational Education. 
Transferable: CSU and private colleges.

MFGT B52 Industrial Fluid Power (3 units)
Theory and practical application of hydraulics, pneumatics, and electrical control of fluid power. Designing ladder logic for fluid power circuits and interfacing electrical controls. 
Recommended: MATH B50 with a grade of C or better, Reading - 1 level prior to transfer. 
Hours: 54 lect, 18 lab. Repeat: 2. CCS: Occupational Education. Not Transferable: Associate Degree only.

MFGT B53 Machine Tool Set-Up (3 units)
Machine shop practices with an emphasis on safety, benchmark techniques, applied mathematics, set-up techniques used on milling machines, lathes, and drill presses. This class also introduces precision grinding, basic metallurgy and heat treatment. 
Recommended: MFGT B1AB with a grade of C or better. 
Hours: 36 lect, 54 lab. Repeat: 2. Offered: F. S. CCS: Occupational Education. 
Not Transferable: Associate Degree only.

MARKETING
See Business Administration

MATHEMATICS

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

MATH BA Elementary Algebra (5 units)
Fundamental concepts and mathematical processes, first degree equations, special products and factoring, fractions and fractional equations, ratios, proportions, radicals, exponents, graphs, simultaneous linear equations, quadratic equations. 
Prerequisite: MATH B50 with a grade of C or better or equivalent pre-algebra course with a grade of “C” or better or qualifying score on placement assessment. 
Recommended: Reading - 1 level prior to transfer. 

MATH BB Geometry (5 units)
Includes congruence and similarity of triangles, parallel and perpendicular lines, quadrilaterals, polygons, circles, the Pythagorean Theorem, ratio and proportion, area and volume. Deductive reasoning is used extensively with various methods of proof. 
Prerequisites: MATH BA with a grade of C or better or one year of high school algebra or equivalent with a grade of “C.” 
Recommended: Reading - 1 level prior to transfer. 
Hours: 90 lect. Offered: S, SS. CCS: Liberal Arts & Sciences. 
Not Transferable: Associate Degree only. BC GE B.2.
MATH BD Intermediate Algebra (5 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 with a grade of C or better or one year of high school algebra equivalent with a grade of “C.” 

MATH B1a Precalculus I (4 units)
Preparation for calculus; the algebraic and graphical analysis of polynomial, rational, logarithmic and exponential functions and their applications; systems of linear and nonlinear equations; graphing, inequalities, absolute value, and complex numbers. Prerequisite: MATH BD with a grade of C or better or two years of high school algebra or equivalent with a grade of “C.” Hours: 72 lect. Offered: F, S, SS. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE B.2; CSU GE B.4; IGETC 2.

MATH B1b Precalculus II (4 units)
Definitions of trigonometric functions, graphs of trigonometric functions, use of trigonometric functions in problem solving, derivation of trigonometric identities, verification of trigonometric identities solution of conditional trigonometric equations, study of inverse trigonometric functions, trigonometric form of complex numbers and DeMoivre’s Theorem; analytic geometry, mathematical induction, an introduction to sequences and series. Prerequisite: MATH B1a with a grade of C or better or equivalent. Hours: 72 lect. Offered: F, S, SS. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE B.2; CSU GE B.4; IGETC 2.

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 with a grade of C or better or two years of high school algebra or equivalent with a grade of “C.” Hours: 90 lect. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE B.2; CSU GE B.4; IGETC 2.

MATH B4a Mathematics for Elementary School Teaching I (5 units)
Designed for prospective elementary school teachers. Development of real numbers including integers, rational and irrational numbers, computation, prime numbers and factorizations, and problem-solving strategies. Prerequisite: MATH BD with a grade of C or better or equivalent with a grade of “C.” Recommended: Reading - 1 level prior to transfer. Hours: 90 lect. Offered: F, S. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges. BC GE B.2.

MATH B4b Mathematics for Elementary School Teaching II (5 units)
Designed for prospective elementary school teachers. Counting methods, elementary probability and statistics. Topics in geometry to include polygons, congruence and similarity, measurement, geometric transformations, coordinate geometry, and connections between numbers and geometry with selected applications. Prerequisite: MATH B4a with a grade of C or better. Hours: 90. Offered: F, S. CCS: Liberal Arts and 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 B1b with a grade of C or better or equivalent with a grade of “C” or better. Hours: 72 lect. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE B.2; CSU GE B.4; IGETC 2.

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 with a grade of C or better or equivalent with a grade of “C” or better. Hours: 72 lect. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE B.2; CSU GE B.4; IGETC 2.

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 with a grade of C or better or equivalent with a grade of “C.” Hours: 72 lect. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. IGETC 2.

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 lect. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. IGETC 2.

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 B6e or equivalent with a grade of “C.” Hours: 54 lect. Offered: S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. IGETC 2.
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 - 1 level prior to transfer. Hours: 90 lect. Offered: F, S, SS. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE B.2; CSU GE B.4.

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. Interested students should talk with their math instructor for an evaluation of their math skills. Hours: 18 for each unit. Field trip may be required. Repeat: 3. CCS: Liberal Arts & Sciences. Transferable: CSU and private colleges. BC GE B.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 equivalent with a grade of “C” or higher. Hours: 90 lect. Offered: F, S, SS. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE B.2; CSU GE B.4; IGETC 2.

MATH B23 Finite Mathematics (3 units)
Includes 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, sets and counting, and Venn diagrams. Prerequisite: Math BD with a grade of “C” or better. Hours: 54 lect. Offered: F, S. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges. BC GE B.2; CSU GE B.4; IGETC 2.

MATH B24 Early Field Experience in the Elementary School Classroom with an Emphasis in Mathematics (2 units)
Observation and supervised participation in an elementary school classroom (grades K-8). Provides the prospective elementary school teacher with a frame of reference for further work and study in the teaching profession. Emphasis on learning and teaching mathematics. Students will tutor K-8 students as part of their assignment. Offered on a credit/no-credit basis only. Recommended: Reading - 1 level prior to transfer. Hours: 36 lect, 54 lab. Offered: F, S. CCS: Liberal Arts and Sciences. Transferable: CSU and private colleges.

MATH B25 Early Field Experience in the Secondary School Classroom with an Emphasis in Mathematics (2 units)
Observation and supervised participation in a secondary school classroom (grades 7-12). Provides the prospective secondary school teacher with a frame of reference for further work and study in the teaching profession. Emphasis will be placed on learning and teaching mathematics. Students will tutor mathematics as part of their assignment. Offered on a Pass/No Pass basis only. Prerequisite: MATH BD with a grade of C or better. Recommended: Reading - 1 level prior to transfer. English Level 5. Hours: 18 lect, 36 lab. Field trips may be required. CCS: Liberal Arts and Sciences. Transferable: CSU and private colleges.

MATH B50 Modern College Arithmetic and Pre-Algebra (4 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. Prerequisite: ACDV B78 or equivalent arithmetic course with a grade of “C” or better or qualifying score on placement assessment. Hours: 72 lect. Offered: F, S. CCS: Precollegiate - basic skills. Not Transferable: Not degree applicable.

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: 27 hours arranged. Open entry/open exit. Repeat: 3. CCS: Liberal Arts and Sciences. Not Transferable: Not degree applicable.

MECHANIZED AGRICULTURE

MCAG B1 Introduction to Agricultural Mechanics (3 units)
The application of mechanical skills in the field of agriculture. Primarily shop skills dealing with wood, metal, concrete, electrical and usage of common farm type tools to complete assigned shop projects. Recommended: Reading - 1 level prior to transfer. Hours: 36 lect, 54 lab. Offered: F, S. CCS: Occupational Education. Transferable: CSU and private colleges.

MEDICAL SCIENCE

MEDS B20 Introduction to Health of the Under Served and Linguistic Minority Communities (2 units)
Overview of the dynamics and processes underlying the health profiles of Latinos/as and other under representative minorities. Aims to transform a student’s individual interest in health into a health professional career goal. Population projections, population characteristics, birth rates, birth rates and outcomes,
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 - 1 level prior to transfer. Hours: 36 lect, field trip required. Offered: F, S CCS: Liberal Arts and Sciences. Transferable: CSU and private colleges. BC GE E; CSU GE E.

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 lect. Offered: F, S, SS. CCS: Occupational Education. Not Transferable: Not Degree applicable.

MEDS B52 Basic Life Support for Healthcare Providers (0.5 unit)
An initial or retraining course in Basic Life Support that provides basic knowledge and skills of Basic Life Support and AED use for victims of all ages. Skills learned will enable students to recognize emergencies and how to respond to them. At the end of the course, the successful student will qualify for an American Heart Association Healthcare Provider BLS card. Hours: 9. Repeat: As needed for recertification. CCS: Occupational Education. Offered: F, S, SS. Not Transferable: Associate Degree only.

MEDS B60 Medical Terminology (3 units)
A study of basic medical terms related to the major body systems. Three units are required for radiologic technology, medical billing and transcribers. Hours: 54 lect. Offered: F, S. CCS: Occupational Education. Not Transferable: Associate Degree only.

MEDS B65 Cardiac Rhythm Interpretation (2 units)

MEDS B66 Intravenous Therapy and Blood Withdrawal (2 units)
Principles of intravenous therapy and blood withdrawal. Designed to enable the Licensed Vocational Nurse to safely initiate and maintain intravenous therapy in a clinical setting. LVN’s successfully completing the course will be certified by the California Board of Vocational Nurse Examiners to initiate and superimpose intravenous fluids. Prerequisite: Healthcare provider. Hours: 27 lect, 9 lab. Offered: F, S. CCS: Occupational Education. Not Transferable: Associate Degree only.

MEDS B68 Home Health Aide (1 unit)
This course builds upon the foundation of the nurse assistant training to allow students to be certified home health aides. Topics include introduction to aide and agency role, interpretation of medical and social needs of clients, personal care services, nutrition, and cleaning and care tasks in the home. Prerequisite: Certified Nurse Assistant. Hours: 20 lect, 20 lab. Offered: F, S, SS. CCS: Occupational Education. Not Transferable: Associate Degree only.

MEDS B69 Nurse Assistant (6 units)
The focus of this course is to prepare the nurse assistant for certification by the State of California as an entry-level worker on a health care team. The curriculum is structured to provide theory and practical application on skills needed to function as a nurse assistant. Correlated laboratory experiences are provided with an emphasis on providing basic nurse assistant care to residents in a long term setting. Concepts presented in MEDS B69 are applied in the laboratory and clinical settings. Note: formerly MEDS B67 and MEDS B67L. Recommended: MEDS B60 with a grade of C or better. Hours: 63 lect, 135 lab. Repeat: 1. Offered: F, S, SS. CCS: Occupational Education. Not Transferable: Associate Degree only.

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. Hours: 54 lect. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C; CSU GE C.1; IGETC 3.A.

MUSC B4a-B4b Elementary Theory (3-3 units)
A study of common practice harmony. MUSC B4a: Diatonic harmony including scales, key signatures, triad and seventh chord construction and 4-part voice leading including phrase structure. Prerequisite: MUSC B2 with a grade of C or better or evaluation by instructor of theory fundamentals. Recommended: Reading - 1 level prior to transfer. Corequisite: MUSC B15a and MUSC B230a. MUSC B4b: Chromatic harmony from secondary dominants through augmented sixth chords including simple form analysis and
modulation. **Prerequisite:** MUSC B4a with a grade of C or better or evaluation by instructor of theory fundamentals. **Recommended:** Reading - 1 level prior to transfer.

**Corequisite:** MUSC B15b and MUSC B230b. **Hours:** 54 lect for each 3 unit course. CCS: Liberal Arts and Sciences. **Offered:** F (MUSC B4a) S (MUSC B4b). **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.1; IGETC 3.A.

**MUSC B4c Intermediate Theory-Contemporary Materials (3 units)**

Study of compositional styles and practices of Western art music since the late 19th century including practical application in composition: Covers advanced chromaticism, impressionism, serialism, basic set theory, and jazz harmony. **Prerequisite:** MUSC B4b with a grade of C or better. **Corequisite:** MUSC B15c. **Hours:** 54 lect. **Offered:** S. CCS: Liberal Arts and Sciences. **Transferable:** UC, CSU and private colleges. **Note:** not open to students who have taken the equivalent course, MUSC B4d. Formerly MUSC B4d.

**MUSC B5a Class Piano (1 unit)**

Beginning study of piano: Includes instruction in note reading, technical exercises, and repertoire study. Intended for students preparing to teach in the elementary grades and for music majors specializing in voice or instruments, other than the piano. **Recommended:** Reading and Writing - 1 level prior to transfer. **Hours:** 54 lab. **Repeat:** 3. **Offered:** S. CCS: Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C.

**MUSC B5b Class Piano (1 unit)**

Continuing study of piano beyond beginning level (MUSC B5a): Includes instruction in elementary keyboard theory, technical exercises, and repertoire study. Intended for students preparing to teach in the elementary grades and for music majors specializing in voice or instruments, other than the piano. **Prerequisite:** Demonstration by audition of piano skills of at least MUSC B5a level. **Recommended:** MUSC B5a or Reading and Writing- 1 level prior to transfer. **Hours:** 54 lab. **Repeat:** 3. **Offered:** F, S. CCS: Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BCGE C.

**MUSC B6a Class Voice (1 unit)**

Elementary solo vocal training. Emphasizes breath control, tone placement, posture, diction and interpretive concepts. **Recommended:** Basic understanding of music fundamentals. **Hours:** 54 lab. **Repeat:** 3. **Offered:** F, S. CCS: Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C.

**MUSC B6b Class Voice (1 unit)**

Solo vocal training. Emphasizes repertoire and further technical development beyond the level of MUSC B6a. **Prerequisite:** Demonstration by audition of skill of at least MUSC B6a level. **Hours:** 54 lab. **Repeat:** 3. **Offered:** F, S. CCS: Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C.

**MUSC B6c Class Voice (1 unit)**

Solo vocal training. Emphasizes repertoire and further technical development beyond the level of MUSC B6c. **Prerequisite:** Demonstration by audition of skill of at least MUSC B6b level. **Hours:** 54 lab. **Repeat:** 3. **Offered:** F, S. CCS: Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

**MUSC B6d Class Voice (1 unit)**

Solo vocal training. Emphasizes repertoire and further technical development beyond the level of MUSC B6c. **Prerequisite:** Demonstration by audition of skill of at least MUSC B6c level. **Hours:** 54 lab. **Repeat:** 3. **Offered:** F, S. CCS: Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges.

**MUSC B9a Beginning Class Guitar (1 unit)**

A guitar course in sequence 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, scales, arpeggios, slurs, bar chords, and strumming. A suitable acoustic guitar is required. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lab. **Offered:** F, S. CCS: Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C.

**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 with a grade of C or better or guitar playing ability of at least MUSC B9a; Beginning Class Guitar level as determined by instructor. **Hours:** 54 lab. **Repeat:** 3. **Offered:** F, S. CCS: Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C.

**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 with a grade of C or better. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 36 lab. **Repeat:** 3. **Offered:** F, S. CCS: Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C.

**MUSC B10a Concert Band (1 unit)**

Rehearsal and performance of standard band literature. Participation in public performances such as concerts, assemblies, and additional rehearsals are required. **Prerequisite:** Audition required. **Hours:** 54 lab. Field trips required. **Repeat:** 3. **Offered:** F, S. CCS: Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C.

**MUSC B10b Concert Band (1 unit)**

Rehearsal and performance of standard band literature. Participation in public performances such as concerts, assemblies, and additional rehearsals are required. **Prerequisite:** Audition required. **Hours:** 54 lab. **Repeat:** 3.
MUSC B10c Concert Band (1 unit)
Rehearsal and performance of standard band literature. Participation in public performances such as concerts, assemblies, and additional rehearsals are required.

MUSC B10d Concert Band (1 unit)
Rehearsal and performance of standard band literature. Participation in public performances such as concerts, assemblies, and additional rehearsals are required.

MUSC B12a College Orchestra (1 unit)
Performance of standard works from the orchestra literature. Field trips required. Prerequisites: Limitation on enrollment (e.g. performance tryout or audition). Hours: 54 lab. Repeat: 3. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C.

MUSC B12b College Orchestra (1 unit)
Performance of standard works from the orchestra literature. Field trips required. Prerequisites: Limitation on enrollment (e.g. performance tryout or audition). Hours: 54 lab. Repeat: 3. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C.

MUSC B12c College Orchestra (1 unit)
Performance of standard works from the orchestra literature. Field trips required. Prerequisites: Limitation on enrollment (e.g. performance tryout or audition). Hours: 54 lab. Repeat: 3. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C.

MUSC B12d College Orchestra (1 unit)
Performance of standard works from the orchestra literature. Field trips required. Prerequisites: Limitation on enrollment (e.g. performance tryout or audition). Hours: 54 lab. Repeat: 3. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C.

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. Recommended: Reading - 1 level prior to transfer. Hours: 54 lab for each unit. Field trips required. Repeat: 3 (for each component). Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C.

MUSC B14a College Choir (1.5 units)
Study of major choral literature of all the historical periods. Public performance required for credit. Prerequisite: Limitation on enrollment (e.g. Performance tryout or audition). Hours: 81 lab. Field trips for performances are required. Repeat: 3. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C.

MUSC B14b College Choir (1.5 units)
Study of major choral literature of all the historical periods. Public performance required for credit. Prerequisite: Limitation on enrollment (e.g. Performance tryout or audition). Hours: 81 lab. Field trips for performances are required. Repeat: 3. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C.

MUSC B14c College Choir (1.5 units)
Study of major choral literature of all the historical periods. Public performance required for credit. Prerequisite: Limitation on enrollment (e.g. Performance tryout or audition). Hours: 81 lab. Field trips for performances are required. Repeat: 3. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C.

MUSC B14d College Choir (1.5 units)
Study of major choral literature of all the historical periods. Public performance required for credit. Prerequisite: Limitation on enrollment (e.g. Performance tryout or audition). Hours: 81 lab. Field trips for performances are required. Repeat: 3. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C.

MUSC B15ab Ear Training and Sight Singing (1-1 unit)

MUSC B15c Intermediate Ear Training/Sight Singing (1 unit)

MUSC B17a Chamber Singers (1.5 units)
A select choral group, specializing in rehearsal and performance of all choral literature for all historical periods. Public performance required for credit. Enrollment subject to audition.
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. Recommended: Reading - 1 level prior to transfer. Hours: 54 lect for each 3 unit course. Offered: B21a F; B21b S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C; CSU GE C.1; IGETC 3.A.

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 - 1 level prior to transfer. Hours: 54 lect. Fields trips may be required. Offered: F, S, SS. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C; CSU GE C.1; IGETC 3.A.

MUSC B23 Appreciation of Jazz (3 units)
History and appreciation of jazz. Lectures, private listening, and concert attendance are required. Recommended: Reading - 1 level prior to transfer. Hours: 54 lect. Offered: F, S, SS. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C; CSU GE C.1; IGETC 3.A.

MUSC B24 A Survey of World Music (3 units)
An introductory course surveying some of 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 lect. Offered: F, S, SS. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C; CSU GE C.1; IGETC 3.B.

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 - 1 level prior to transfer. Hours: 54 lect. Offered: F, S, SS. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C; CSU GE C.1; IGETC 3.A.

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. Prerequisite: Limitation on Enrollment (e.g. Performance tryout or audition). Recommended: Reading - 1 level prior to transfer. Hours: 54 lab for each unit. 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, digital and analog recording and mixing. Prerequisite: B60a: MUSC B2 with a grade of C or higher 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 lect for each 3 unit course. CCS: Occupational Education. Not Transferable: Associate degree only.

MUSC B230a-B230b-B230c Music Laboratory (0.5 unit. Limit 2 units)
A computer-based, positive attendance course featuring self-pacing programmed system instruction in one of two self-directed music technology areas: reading, transcription, and performing rhythmic, harmonic, and melodic elements of music and/or generating, manipulating, editing, and producing digital audio content by gaining experience with digital audio workstations (DAWs). Offered on a Pass/No Pass basis. Hours: 27 lab for one-half unit. Repeat: 3, or until 2 units is reached. CCS: Liberal Arts & Sciences. Not Transferable: Not degree applicable.

NATURAL RESOURCES MANAGEMENT
See Agriculture

NURSING, REGISTERED

NURS B20 Fundamentals of Nursing (4 units)
This Level 1 course introduces the concepts of the professional nurse, nursing skills, beginning leadership, health care environment, growth and development across the lifespan, basic physiologic and human needs in health and illness, and providing a safe environment. Beginning critical thinking skills are emphasized, within the framework of the nursing process. Correlated clinical experiences are provided with adult patients who have basic health problems with predictable outcomes. The roles of Provider of Care, Manager of Care, and Member of the Profession are introduced and integrated throughout the course. Prerequisite: Appropriate standing in the Associate Degree Nursing Program or evaluation of skills and knowledge by the Program Director. Recommended: None. Hours: 36 lect, 108 lab. Offered: F, S. CCS: Occupational Education. Transferable: CSU and Private Colleges.

NURS B21 Medical Surgical Nursing 1 (5 units)
This Level 1 course introduces medical surgical nursing concepts and practices as they relate to adult clients across the lifespan. Using the nursing process as the framework, the student will begin to recognize alterations in function or illness, and formulate age appropriate nursing interventions. Correlated clinical experiences are provided with adult patients who have basic health problems with predictable outcomes. The roles of Provider of Care, Manager of Care, and Member of the Profession are introduced and integrated throughout the course. Prerequisite: Appropriate standing in the Associate Degree Nursing Program or evaluation of skills and knowledge by the Program Director. Recommended: None. Hours: 45 lect, 135 lab. Offered: F, S. CCS: Occupational Education. Transferable: CSU and Private Colleges.

NURS B22 Pharmacology (3 units)
This Level 1 course provides the foundation knowledge base related to pharmacology in nursing, including both theoretical and mathematical aspects. The course uses the nursing process as the framework, and addresses the roles of provider of care, manager of care, and member of the profession. Fundamental principles of pharmacodynamics, pharmacokinetics, legal and ethical issues, and nursing responsibilities are covered. Information regarding intravenous drug administration is limited to pharmacokinetics. The drug classes most commonly used in clinical practice are presented. Additionally, information regarding basic mathematical calculations related to medication administration is introduced. Prerequisite: Appropriate standing in the Associate Degree Nursing Program or evaluation of skills and knowledge by the Program Director. Recommended: None. Hours: 54 lect. Offered: F, S. CCS: Occupational Education. Transferable: CSU and Private Colleges.

NURS B23 Medical Surgical Nursing 2 (4.5 units)
This Level 2 course focuses on the development of the knowledge base and skills to care for patients across the lifespan, in various settings, who have higher acuity and more complex nursing needs. The nursing process is the framework for identification and treatment of health problems, and other concerns. Correlated clinical experiences emphasize clinical decision making, patient care management, including prioritization of care, and development of psychomotor skills. Leadership and management knowledge and skills are integrated in both the theory and clinical components. The roles of Provider of Care, Manager of Care, and Member of the Profession are integrated throughout the course. Prerequisite: Appropriate standing in the Associate Degree Nursing Program or evaluation of skills and knowledge by the Program Director. Recommended: None. Hours: 45 lect. 108 lab. Offered: F, S. CCS: Occupational Education. Transferable: CSU and Private Colleges.

NURS B24 Obstetrics - Maternity Nursing (3.0 units)
This Level 2 course provides a foundation for theoretical and technical knowledge base while caring for the contemporary family centered childbirth. Parent/newborn issues are viewed from a nursing process approach for the antepartum, intrapartum, postpartum, and neonatal client. Correlated clinical experiences emphasize clinical decision making, patient care management, including prioritization of care, and development of psychomotor skills. The roles of Provider of Care, Manager of Care, and Member of the Profession are integrated in both the theory and the clinical components. Prerequisite: Appropriate standing in the Associate Degree Nursing Program or evaluation of skills and knowledge by the Program Director. Recommended: None. Hours: 27
NURS B25 Mental Health - Psychiatric Nursing (3.5 units)
This Level 2 course provides an introduction to Psychiatric Mental Health Nursing, using the nursing process as the framework to promote psychosocial integrity within the context of the health illness continuum across the life span. Emphasis is on therapeutic interactions and communications, bio-psychosocial rehabilitation and therapeutic use of self. Correlated clinical experiences will provide opportunities for students to participate in therapeutic activities in a variety of mental health settings. The roles of Provider of Care, Manager of Care, and Member of the Profession are integrated in both the theory and the clinical components. Prerequisite: Appropriate standing in the Associate Degree Nursing Program or evaluation of skills and knowledge by the Program Director. Recommended: None. Hours: 36 lect, 81 lab. Offered: F, S. CCS: Occupational Education. Transferable: CSU and Private Colleges.

NURS B26 Medical Surgical Nursing 3 (5.5 units)
This Level 3 course focuses on the application of previously learned knowledge as well as the development of more in depth knowledge for adult clients across the lifespan who have more diverse and complex disease states. The nursing process is the framework used in this course to present topics, such as leadership, critical thinking, pharmacology and safety. Correlated clinical experiences are provided with adult patients who have increasingly complex outcomes. The roles of Provider of Care, Manager of Care, and Member of the Profession are integrated and analyzed throughout the didactic and clinical experiences. Prerequisite: Appropriate standing in the Associate Degree Nursing Program or evaluation of skills and knowledge by the Program Director. Recommended: None. Hours: 45 lect, 162 lab. Offered: F, S. CCS: Occupational Education. Transferable: CSU and Private Colleges.

NURS B27 Pediatric Nursing (3.5)
This level 3 course provides a foundation for pediatric nursing using growth and development concepts as a framework for presenting 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. Correlated clinical experiences emphasize clinical decision making, patient care management, including prioritization of care, and development of psychomotor skills. The roles of Provider of Care, Manager of Care, and Member of the Profession are integrated in both the theory and the clinical components. Prerequisite: Appropriate standing in the Associate Degree Nursing Program or evaluation of skills and knowledge by the Program Director. Recommended: None. Hours: 27 lect, 108 lab. Offered: F, S. CCS: Occupational Education. Transferable: CSU and Private Colleges.

NURS B28 Medical Surgical Nursing 4 (7.0 units)
This capstone course focuses on the integration of knowledge and skills through analysis and synthesis. The nursing process is used as the framework for providing nursing care to clients who have critical and complex medical conditions. Correlated clinical experiences emphasize refinement of clinical decision-making, formulating and revising priorities of care; psychomotor skills and patient care management. The roles of Provider of Care, Manager of Care, and Member of the Profession are integrated to promote success in transitioning from student to entry level Registered Nurse. Prerequisite: Appropriate standing in the Associate Degree Nursing Program or evaluation of skills and knowledge by the Program Director. Recommended: None. Hours: 54 lect, 216 lab. Offered: F, S. CCS: Occupational Education. Transferable: CSU and Private Colleges.

NURS B29 Gerontology - Community Nursing (2.0 units)
This level 4 course integrates previous medical surgical knowledge and leadership skills as it applies to the aging adult. The Nursing process framework is used to explore the lifestyle and physical changes that occur with aging, apply the process of initiating health referrals and propose the outcome criteria for evaluating the aging individual’s response to teaching/learning. Correlated clinical experiences will emphasize the application of interventions that will increase the older adult’s functional ability. The roles of Provider of Care, Manager of Care, and Member of the Profession are integrated throughout the didactic and clinical experiences. Prerequisite: Appropriate standing in the Associate Degree Nursing Program or evaluation of skills and knowledge by the Program Director. Recommended: None. Hours: 18 lect, 54 lab. Offered: F, S. CCS: Occupational Education. Transferable: CSU and Private Colleges.

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 by arrangement. Repeat: 3. Offered: F, S. CCS: Occupational Education. Not Transferable: Not degree applicable. Not open to students who have taken the equivalent course, NURS B252.

NURS B60 Perioperative Nursing Practicum (1 unit)
Clinical experience in perioperative nursing. Designed to apply the concepts of perioperative nursing using the nursing process in a clinical setting. Prerequisite: Current licensure as a California Registered Nurse or enrollment in a Registered Nursing Educational Program. Hours: 54 lab. Offered: F, S. CCS: Occupational Education. Not Transferable: Associate Degree only.
NURS B70 Role Transition: Bridging Nursing Theory to Practice (2 units)
This level 3 course is designed for the LVN who is pursuing licensure as an RN or the RN who wants to update skills to re-enter the workforce. The focus is on the development of critical thinking skills, physical assessment, the nursing process, role transition, and clinical skill competencies. The roles of provider of care, manager of care, and member of the profession are integrated throughout the course. The lab correlates with the didactic portion and provides an opportunity for application of concepts in the Nursing Skills Lab. Prerequisite: LVN or RN licensure; or Nursing student with evaluation of skills and knowledge by the ADN Program Director. Recommended: None. Hours: 27 lect, 27 lab. Repeat: 2. Offered: F, S, SS. CCS: Occupational Education. Not Transferable: Not degree applicable.

NURS B100 Strategies for Success in a Nursing Program (2 units)
Designed to prepare students for successful completion of the nursing program. The student will be given an overview of the program requirements and expectations and they will acquire information and skills that facilitate student success once admitted into the program. Student will also explore nursing career options which will guide the development of their educational plan. Satisfies the 0.5 unit educational planning requirement for graduation from Bakersfield College. Pass/No Pass grading only. Hours: 36 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

NURS B201a Learning Lab (1 unit)
An on-campus laboratory designed for self-paced practice and mastery of nursing skills necessary for providing safe client care throughout the program. This level 1 course provides instructional guidance to assist students to refine newly acquired skills and develop the competency level expected of entry-level nurses. Multimedia and computer assisted instructional materials which support the semester learning objectives are available. Subsequent enrollment in additional semesters will offer the student an opportunity for additional skill and competency development within the subject matter. Prerequisite: Enrollment into the ADN or LVN program or nursing student with evaluation of skills and knowledge by the ADN Program Director. Offered Pass/No Pass grading only. Offered: F, S, SS. Hours: 54 lab. Open entry/open exit. Repeat 2. CCS: Occupational Education. Not Transferable: Not degree applicable.

NURS B201b Learning Lab (1 unit)
An on-campus laboratory designed for self-paced practice and mastery of nursing skills necessary for providing safe client care throughout the program. This level 2 course builds upon content from level 1 curriculum and provides instructional guidance to assist students to refine newly acquired skills and develop the competency level expected of entry-level nurses. Multimedia and computer assisted instructional materials which support the semester learning objectives are available. Subsequent enrollment in additional semesters will offer the student an opportunity for additional skill and competency development within the subject matter. Prerequisite: Enrollment into the ADN or LVN program or nursing student with evaluation of skills and knowledge by the ADN Program Director. Offered Pass/No Pass grading only. Offered: F, S, SS. Hours: 54 lab. Open entry/open exit. Repeat 2. CCS: Occupational Education. Not Transferable: Not degree applicable.

NURS B252 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 by arrangement. Open entry/open exit. Repeat: 3. Offered: F, S. CCS: Occupational Education. Not Transferable: Not degree applicable. Not open to students who have taken the equivalent course, NURS B52.
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 dysrythmias, 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 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 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 by arrangement. Open entry/open exit. Repeat: 3. Offered: F, S. CCS: Occupational Education. Not Transferable: Not degree applicable.

NURS B256 Nursing Laboratory Internship (1-3 units)
Provides registered nursing students with an extended opportunity to obtain supervised clinical experience in the application of previously learned knowledge and skills in selected clinical areas. This will increase the confidence, critical thinking skills, competency and better prepare students as they assume the role of the professional student nurse and progress toward the nurse extern and graduate nurse. Prerequisite: Current enrollment and completion of at least the 1st semester of the Associate Degree Nursing Program. Hours: 54-162 by arrangement. Repeat: 3. CCS: Occupational Education. Offered: F, S. SS. Not Transferable: Associate Degree only.

NURS B257 Nursing Laboratory Externship (1-3 units)
Provides Registered Nursing students with an opportunity to obtain clinical experience in the application of all previously learned knowledge and skills in various clinical settings. Students will work in a collaborative role with clinical preceptors. This will allow students to practice more independently under the supervision of clinical agency personnel. This will increase the student’s nursing judgment skills, critical thinking skills, and competency. The clinical experience in the externship will better prepare students as they assume the role of the professional graduate nurse. Prerequisite: Current enrollment, in good standing, in the VN Program and concurrent enrollment in NURS B256, or evaluation by all 3rd semester instructors of student’s nursing skills. Hours: 54-162 lab. Repeat: 2. CCS: Occupational Education. Offered: F, S. SS. Not Transferable: Associate Degree only.

NURSING, VOCATIONAL
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.

VNRS 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 VNRS B1LV. Hours: 54 lect. Offered: F, S. CCS: Occupational Education. Transferable: CSU and private colleges.

VNRS B1g Gerontological Nursing (1 unit)
Provides a foundation of basic gerontological nursing using demographics, theories of aging and growth and development concepts as a framework for presenting health problems and special concerns of the elderly. Legal and ethical issues, economics, and healthcare 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 VNRS B1LV. Hours: 18 lect. Offered: F, S. CCS: Occupational Education. Transferable: CSU and private colleges.

VNRS B1LV Vocational Nursing Laboratory (6 units)
Laboratory course correlated with the 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 VNRS B1, VNRS B75 and VNRS B1G. Hours: 324 lab. CCS:
VNRS B6 Pediatric Nursing (1.5 units)
Provides a foundation for pediatric nursing using growth and development concepts as a framework for presenting principles of pharmacology and drug administration. Legal and ethical issues associated with medication administration are discussed. A nursing process approach is utilized throughout every aspect of drug study and drug administration. Prerequisites: Completion of the first semester of ADN or second semester VN program or evaluation by program director of skills and knowledge, concurrent enrollment in VNRS B97LV. Hours: 27 lect. Offered: F, S. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Not open to students who have taken the equivalent course, NURS B7.

VNRS B7 Parent/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 VNRS B97LV. Hours: 27 lect. Offered: F, S. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Not open to students who have taken the equivalent course, NURS B7.

VNRS B31ab Basic Pharmacology (2 units)
Provides a foundation for pharmacological nursing using the nursing process as the framework for presenting concepts and principles of pharmacology and drug administration. Legal and ethical issues, nursing responsibilities, and client participation 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 for skills and knowledge. Hours: 36 lect. Offered: F, S. CCS: Occupational Education. Transferable: CSU and private colleges.

VNRS B50a Advanced Pharmacology (0.5 unit)
Designed to prepare the vocational nurse to function safely when administering medication to a group of clients. Student will be administering medications to more complex clients in the laboratory setting. Expounds on principles learned in VNRS B31ab. Prerequisite: Appropriate standing in the VN Program and VNRS B31ab with a grade of “C” or better. Hours: 9 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

VNRS B50b Advanced Pharmacology - Part B (0.5 units)
Designed to prepare the vocational nurse to function safely when administering medication to a group of clients. Students will be administering medications to more complex clients in

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 the 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 corresponding NURS B1LV. Prerequisite: Appropriate standing in the VN Program and concurrent enrollment in NURS B1LV. Hours: 64 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

VNRS B85 Medical Surgical Nursing II (2.5 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). 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 B85LV. Prerequisite: Appropriate standing in the VN Program and concurrent enrollment in VNRS B85LV. Hours: 45 lect. CCS: Occupational Education. Not Transferable: Associate Degree only.

VNRS B85LV Medical Surgical Nursing II-Clinical Laboratory (1.5 units)
Lab course which is correlated with the corresponding medical surgical course in the Vocational Nursing Program. Focus of course is team leading, time management in caring for two clients, providing medications to a group of clients and in improving on skills learned in Medical Surgical Nursing I. Incorporated into this course is the utilization of intermediate assessment, planning, intervention and evaluation under clinical supervision. Prerequisite: Appropriate standing in the VN Program and concurrent enrollment in VNRS B85. Hours: 81 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

VNRS B86 Medical Surgical Nursing III (4 units)
Provides a study of etiology, pathophysiology, assessment, planning, and evaluation of adult clients with musculoskeletal, connective tissue, and endocrine disorders. Knowledge imparted builds on nursing theory from the previous medical surgical nursing course (VNRS B75, VNRS B85). 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 B86LV. **Prerequisite:** Appropriate standing in the VN Program and concurrent enrollment in VNRS B86LV. **Hours:** 72 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**VNRS B86LV Medical Surgical Nursing III - Clinical Laboratory (3 units)**

Laboratory course correlated with the corresponding medical surgical course in the Vocational Nursing Program. Focus is team leading, time management in caring for two clients, providing medications to a group of clients and in improving on skills learned in Medical Surgical Nursing II. Incorporated into course is the utilization of intermediate assessment, planning, intervention and evaluation under clinical supervision. **Prerequisite:** Appropriate standing in the VN Program and concurrent enrollment in VNRS B86. **Hours:** 162 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**VNRS B87LV Maternal Newborn-Clinical Laboratory (1.5 units)**

Laboratory course which is correlated with the corresponding maternal-newborn course in the Vocational Nursing Program. 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 VNRS B7. **Hours:** 81 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**VNRS B95 Medical Surgical Nursing IV (4 units)**

Provides a study of etiology, pathophysiology, assessment, planning and evaluation of adult clients with more complex and critical medical surgical problems and disease states, including multi-system involvement and trauma. Emphasis placed on advanced medical skills. Concepts and skills in this course will be correlated in the various clinical settings presented in the Medical-Surgical Laboratory. **Prerequisite:** Appropriate standing in the VN Program and concurrent enrollment in VNRS B95LV. **Hours:** 72 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**VNRS B95LV Medical Surgical Nursing IV - Laboratory (2.5 units)**

Laboratory course which is correlated with the corresponding medical surgical course in the Vocational Nursing Program. 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 III. Also covers the utilization of intermediate assessment, planning, intervention and evaluation under clinical supervision. **Prerequisite:** Appropriate standing in the VN Program and concurrent enrollment in VNRS B95. **Hours:** 135 lab. **CCS:** Occupational Education. Not Transferable: Associate Degree.

**VNRS B96 Medical Surgical Nursing V (2 units)**

Provides a study of etiology, pathophysiology, assessment, planning and evaluation of adult clients with more complex and critical medical surgical problems and disease states, including multi-system involvement and trauma. Emphasis placed on advanced medical skills. Concepts and skills in this course will be correlated in the various clinical settings presented in the Medical-Surgical Laboratory. **Prerequisite:** Appropriate standing in the VN Program and concurrent enrollment in VNRS B96LV. **Hours:** 36 lect. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**VNRS B96LV Medical Surgical Nursing V - Laboratory (2 units)**

Laboratory course which is correlated with the corresponding medical surgical course in the Vocational Nursing Program. Focus is team leading, time management in caring for two clients, providing medications to a group of clients and in improving on skills learned in Medical Surgical Nursing IV. Incorporated into course is the utilization of intermediate assessment, planning, intervention and evaluation under clinical supervision. **Prerequisite:** Appropriate standing in the VN Program and concurrent enrollment in VNRS B96. **Hours:** 108 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**VNRS B97LV Pediatrics - Clinical Laboratory (1.5 units)**

Laboratory course which is correlated with the corresponding pediatric course in the Vocational Nursing Program. 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 VNRS B97. **Hours:** 81 lab. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**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 and Writing - 1 level prior to transfer. **Hours:** 54 lect/disc. Field trips may be required. **CCS:** Occupational Education. **Transferable:** UC, CSU and private colleges. BC GE E, CSU GE E.

**NUTR B50 Modified Diets (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 - 1 level prior to transfer. **Hours:** 36 lect/disc. Field trips may be required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.
PHIL B6a Introduction to Philosophy (3 units)
A method, problems, multicultural and historical approach to philosophy. Topics like epistemology (the study of knowledge), metaphysics (the study of reality), ethics (the study of morality), and philosophy of religion are covered from both traditional Western and non-Western sources. Recommended: Reading and Writing - 1 level prior to transfer. Hours: 54 lect. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 3.B.

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 and Writing - 1 level prior to transfer. Hours: 54 lect. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE B.2; CSU GE A.3

PHIL B9 Critical Thinking and Advanced Composition (4 units)
Development of critical thinking skills necessary for evaluating and formulating argumentative/persuasive essays, and practice in applying those skills. Prerequisite: ENGL B1a with a “C” or better. Hours: 72 lect. Offered: F, S, SS. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE B.2; CSU GE A.3, C.2; IGETC 1.B.

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. Discusses how to set up an ethical system. Recommended: Reading - 1 level prior to transfer. Hours: 54 lect. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 3.B.

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, 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 and Writing - 1 level prior to transfer. Hours: 54 lect. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C; CSU GE C.2; CSU GE E.

PHIL B18 History of Ancient Philosophy (3 units)
A survey of the development of Western philosophy from the Presocratics to the Hellenistic philosophers with particular emphasis on the philosophies of Plato and Aristotle. The focus throughout will be on analyzing and evaluating the central arguments of these philosophers as well as understanding how their views have contributed to the subsequent development of philosophy, science, art, and literature. Recommended: Reading and Writing - 1 Level prior to transfer. Hours: 54 lect. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges. BC GE C, CSU GE C.2, IGETC 3.B.

PHIL B32 World Religions: East (3 units)
Survey of two main Eastern religions-Hinduism and Buddhism, and study of other important Asian 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 - 1 level prior to transfer. English Level 6. Hours: 54 lect. Field trips required. Offered: F. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 3.B.

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 practice of an individual in each of these religious traditions. Recommended: Reading - 1 level prior to transfer. English Level 6. Hours: 54 lect. Field trips required. Offered: S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 3.B.
PHIL B37 Introduction to the World 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 - 1 level prior to transfer. Hours: 54 lect. Field trips required. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 3.B.

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.

PHYSICAL EDUCATION
Credit limitations may apply. For specific information see a counselor or the transfer institution. UC campuses give a maximum of four semester units of credit for Physical Education activity courses.

PHED B2 Through B9
Hours: 54 hours activity unless otherwise indicated. Note: Activity courses may be repeated 3 times. Example: PHED 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. CSU GE E.

PHED B2 Aquatics Courses (1 unit)
PHED B2dwr Deep Water Running
PHED B2sb Beginning Swimming, BC GE E.
PHED B2ssf Swim and Stay Fit
PHED B2wa Water Aerobics
PHED B2wp Water Polo

PHED B3adp Adaptive Physical Education (1 unit)
Individualized fitness class for the physically challenged with activities designed to emphasize resistive circuit training combined, when possible, with aerobic training. 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 and justification is documented by a DSPS counselor in the student’s educational plan for the current term. BC GE E.

PHED B5 Team Activities for Women (1 unit)
PHED B5vb-Volleyball.
Recommended: Experience in organized interscholastic Volleyball or equivalent.

PHED B5wsc-Soccer.
Recommended: Experience in organized interscholastic Soccer or equivalent.

PHED B6 Coeducational Team and Individual Activities (1 unit)
PHED B6a Archery, BC GE E.
PHED B6bb Basketball, BC GE E.
PHED B6blb Beginning Ballet (Note: same as DANC B6blb) BC GE E
PHED B6da Dance Aerobics, BC GE E.
PHED B6fcox Fitness Center, BC GE E.
PHED B6 Golf, BC GE E.
PHED B6jd-jazz dance (Note: same as DANC B6jd) BC GE E.
PHED B6kx CardioKickboxing Fitness, BC GE E.
PHED B6md-modern dance (Note: same as DANC B6md), BC GE E.
PHED B6pl Pilates, BC GE E.
PHED B6py Pilates/Yoga Mat Flow, BC GE E.
PHED B6sc Soccer, BC GE E.
PHED B6t Tennis, BC GE E.
PHED B6v Volleyball, BC GE E.
PHED B6wt-Weight Training, BC GE E.
PHED B6y Yoga, BC GE E.

PHED B7 Advanced Team and Individual Activities for Men (1 unit)
PHED B7b Advanced Baseball
Recommended: Experience in organized interscholastic Baseball or equivalent.
PHED B7fb Advanced Football
Recommended: Experience in organized interscholastic Football or equivalent.
PHED B7w Advanced Wrestling.
Recommended: Experience in organized interscholastic Wrestling or equivalent.

PHED B9 Advanced Team and Individual Coeducational Activities (1 unit)
PHED B9s Advanced Swimming
Recommended: Experience in organized interscholastic Swimming or equivalent.
PHED B9t Advanced Tennis
Recommended: Experience in organized interscholastic Tennis or equivalent.
PHED B9tr Advanced Track
Recommended: Experience in interscholastic Track and Field or equivalent.

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 (2 UNITS EACH UNLESS OTHERWISE INDICATED)

Must meet athletic code eligibility requirements. Hours: 180 hours by arrangement (usually 2 hours per day). Field trips may be required. Repeat: 3. CCS: Liberal Arts & Sciences. Transferable: CSU and private colleges. PHED B11-20 transfers to UC. Note: May be substituted for physical education requirement for graduation. (UC campuses give a maximum of four semester units of credit for appropriate Physical Education Activity courses.) BC GE E; CSU GE E.

PHED B10 Intercollegiate Football
PHED B11 Intercollegiate Basketball (Fall-2 units; Spring-1 unit)
PHED B12 Intercollegiate Track and Field
PHED B13 Intercollegiate Tennis
PHED B14 Intercollegiate Baseball
PHED B16 Intercollegiate Golf
PHED B17 Intercollegiate Cross-Country
PHED B20 Intercollegiate Wrestling

INTERCOLLEGIATE COMPETITION FOR WOMEN

(2 UNITS EACH UNLESS OTHERWISE INDICATED)

Must meet athletic code eligibility requirements. Hours: 180 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. (UC campuses give a maximum of four semester units of credit for appropriate Physical Education Activity courses.) BC GE E; CSU GE E.

PHED B22 Women’s Intercollegiate Tennis
PHED B23 Women’s Intercollegiate Soccer
PHED B24 Intercollegiate Golf for Women
PHED B25 Women’s Intercollegiate Volleyball
PHED B26 Women’s Intercollegiate Track and Field
PHED B27 Women’s Intercollegiate Cross-Country
PHED B28 Women’s Intercollegiate Basketball (Fall-2 units; Spring-1 unit)
PHED B29 Women’s Intercollegiate Softball

PHED B30 Dance and Cheer Techniques (1-2 units)

Instruction, training and practical experience in the techniques for the development of cheer routines. Activities include choreography and composition of routines and dance preparations for various college and community service performances. Attendance at athletic events and rallies is required. This class is restricted to members of the current BC Cheer Team only. Prerequisite: Limitation on enrollment: audition (Title 5:58106). Repeat: 3. Hours: 54 hours in the class and field by arrangement for each unit. Offered: F, S, SS. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges. Note: Elective credit only. CSU GE E.

PHED B31 Standard First Aid (1 unit)


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, stress reduction, socialization, and individual differences in human behavior. Hours: 6 lect, 30 participation for 1 unit; 12 lect, 60 participation for 2 units; 18 lect, 90 participation for 3 units. 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. BC GE E; CSU GE E.

PHED B33 Men’s and Women’s Intercollegiate Swimming (2 units)

Intercollegiate Coeducational Competition Prerequisite: Must meet athletic code eligibility requirements. Hours: 180 by arrangement (usually 2 hours per day). Field trips may be required. Repeat: 3. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE E; CSU GE E.

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. Major emphasis will be on prevention of injuries and performance enhancement, through pre-screening for potential biomechanical deficiencies, strength training, conditioning, flexibility, nutrition and proper hydration techniques. The instructor will properly advise students who take this course of limitations and proper skills applications. Hours: 36 lect, 54 lab. Field trip required. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges.

PHED B39b Advanced Athletic Training (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 with a grade of C or better or evaluation by instructor of student’s knowledge of musculoskeletal anatomy. Hours: 36 lect, 54 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 - 1 level prior to transfer. **Hours:** 54 lect. **Offered:** F. S. **Transferable:** UC, CSU and private colleges.

**PHED B41 Recreation Leadership (3 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:** 54 lect/disc. **Transferable:** CSU and Private Colleges.

**PHED B44mb Theory of Basketball - Men (3 units)**
Designed to provide students the opportunity to master coaching techniques, coaching philosophy, practice organization, and various elements of coaching basketball. **Hours:** 54 lect. **Repeat:** 3. **Transferable:** CSU and Liberal Arts and Sciences.

**PHED B44sb Theory of Softball (3 units)**
Designed to provide students the opportunity to master coaching techniques, coaching philosophy, practice organization, and strategies involved in the game of softball. **Hours:** 54 lect. **Repeat:** 3. **Transferable:** UC, CSU and private colleges. **Note:** elective credit only.

**PHED B44so Theory of Soccer (3 units)**
Designed to provide students the opportunity to master coaching techniques, coaching philosophy, practice organization, and strategies involved in the game of soccer. **Hours:** 54 lect. **Transferable:** UC, CSU and private colleges. **Note:** elective credit only.

**PHED B44vb Theory of Volleyball (3 units)**
Designed to provide students the opportunity to acquire coaching techniques, coaching philosophies, practice organizational skills, management and leadership skills, as well as strategies involved in the game of volleyball. **Hours:** 54. **Repeat:** 3. **Transferable:** UC, CSU and private colleges.

**PHED B44wb Theory of Basketball - Women (3 units)**
Designed to provide students the opportunity to master coaching techniques, coaching philosophy, practice organization, and various elements of coaching basketball. **Hours:** 54 lect. **Repeat:** 3. **Transferable:** CSU and private colleges. **Note:** elective credit only.

**PHED B45 Theory of Football (3 units)**
Designed to give students an understanding of the principles of defensive, offensive and the kicking game of football. Also covers practice planning, skill development, game strategies and coaching. **Recommended:** Experience in organized interscholastic Football or the equivalent. **Hours:** 54 lect. **Offered:** F. **Repeat:** 3. **Transferable:** UC, CSU and private colleges.

**PHED B46 Theory of Track and Field (3 units)**
Designed to provide students the opportunity to master coaching techniques, coaching philosophy, practice organization, and administration and officiating at track and field meets. **Hours:** 54 lect. **Repeat:** 3. **Transferable:** CSU and private colleges.

**PHED B47 Theory of Baseball (3 units)**
Designed to provide students the opportunity to master coaching techniques, coaching philosophy, practice organization, and strategies involved in the game of baseball. **Hours:** 54 lect. **Repeat:** 3. **Transferable:** CSU and private colleges. **Note:** Elective credit only.

**PHED B49 Special Topics (1 unit)**
Various activities designed to provide students with lifestyle opportunities in sport and fitness. Emphasis on using the natural and available local environment for sport and fitness activities. Designed to accommodate all levels of physical fitness and skill. **Hours:** 36 participation. **Transferable:** CSU and Liberal Arts and Sciences.

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

**PHSC B12 Physical Science (4 units)**
Introduces facts, principles and laws from physics and chemistry. Includes motion, force, energy, electricity and magnetism, waves, atom, periodic laws, ions, solutions, chemical reaction, organic chemistry. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect, 54 lab. **Transferable:** Reading - 1 level prior to transfer. **Transferable:** UC, CSU and private colleges. **Credit:** UC GE B.1; CSU GE B.1, B.3.

**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.
PHYSICS

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 B1a with a grade of C or higher (may be taken concurrently). Recommended: Reading - 1 level prior to transfer. Hours: 54 lect, 54 lab. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE B.1; CSU GE B.1, B.3; IGETC 5.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, and most other pre-professional and technical majors. Prerequisites: MATH B1b (or old MATH BC), and either PHYS B2a or high school physics with a “C” or better. Recommended: Reading - 1 level prior to transfer. Hours: 54 lect, 54 lab. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges.

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 with a grade of C or better. Recommended: Reading - 1 level prior to transfer. Hours: 54 lect, 54 lab. Offered: S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE B.1; CSU GE B.1, B.3; IGETC 5.A.

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 MATH B6c with a grade of C or better (MATH B6c may be taken concurrently). Hours: 54 lect, 54 lab. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges. BC GE B.1; CSU GE B.1, B.3; IGETC 5.A.

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, physical optics, relativity, quantum physics, quantum mechanics, atomic and molecular physics, solid state physics, and nuclear. Emphasizes principles, laws, and problem solving. Prerequisite: PHYS B4b with a grade of C or better. Recommended: Concurrent enrollment in MATH B6d. Hours: 54 lect, 54 lab. CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges.

POLITICAL SCIENCE

POLS B1 American Government: National, State and local (3 units)

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 States, 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 economics make them important, such as the People’s Republic of China, Brazil, Mexico, Iran, India and Nigeria. Recommended: ENGL B50/ENSL B50 and Writing and Reading - 1 level prior to transfer. Hours: 54 lect. Offered: F. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE D.2; CSU GE D.8; IGETC 4.

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. Recommended: Reading - 1 Level prior to transfer. Hours: 54 lect. Offered: S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE D.2; CSU GE D.8; IGETC 4.

POLS B5 Current Issues in American Government (1-2 units. Limit 6 units)
Study of special current events, such as elections, impeachment proceedings, public policies, or Constitutional revisions. Offered only as such events occur. Hours: 18 lect for each unit. Repeat: 3 or until a limit of 6 units is reached. CCS: Liberal Arts & Sciences. Transferable: CSU and private colleges.

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 environment; political parties, interest group, citizen and media inputs; current problems and changing functions affecting local governments. Partially satisfies the requirements in U.S. Constitution, American history and institutions. Recommended: Writing and Reading - 1 level prior to transfer. Hours: 54 lect. Offered:

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. Recommended: Eligibility for English B50 and Reading - 1 level prior to transfer. Hours: 54 lect. Offered: S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE D.2; CSU GE D.8; IGETC 4.

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: 18 lect, 18 lab for each 2 unit course. CCS: Liberal Arts and Sciences. Transferable: CSU and private colleges. Note: Elective credit only.

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

PSYC B1a General Psychology (3 units)
Emphasis is on the scientific process and research methods employed in psychology. Biological, developmental, cognitive, and sociocultural theories are covered to explain psychological phenomena. Psychological disorders and the evolving corresponding treatment protocols are applied to a diversity of individuals and groups. Recommended: Writing and Reading - 1 level prior to transfer. Hours: 54 lect. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE D.1, E; CSU GE D.9, E; IGETC 4.

PSYC B1b Biological Psychology (3 units)
Ethical standards and current research methodologies for studying brain behavior relationships and mental processes in all life forms: Emphasis placed on using empirical analysis to understand and solve problems related to mechanisms underlying neural conduction and synaptic transmission, sensory and perceptual systems, plasticity, and brain damage, development, learning and memory, hunger, sex, drug use, sleep, lateralization of function and psychological disorders. Designed for psychology majors planning for upper division work in psychology. Recommended: PSYC B1a with a grade of C or better, Reading and Writing - 1 level prior to transfer. Hours: 54 lect. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE B.1; CSU GE B.2; IGETC 5.B.

PSYC B2 Interpersonal and Group Process Skills (3 units)
Readings and practice in skills for effective functioning in interpersonal and group settings: Includes active listening, interviewing, group interaction, decision making and managing conflict. Emphasizes the development of skills and ethical considerations specific to human interaction, relating across differences of race, gender, ethnicity, sexual orientation, and social class. Recommended: PSYC B1a, Reading and Writing- 1 level prior to transfer. Hours: 54 lect. 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 (5 units)
Statistics as applied to the behavioral and social sciences. Introduces basic terminology and measurement scales associated with basic statistics used in behavior and social research. Emphasizes appropriate application and interpretation of measures of central tendency, variation, and correlation, in the use of parametric and nonparametric statistical hypothesis testing. Prerequisites: MATH BD with a grade of C or better. Completion of or concurrent enrollment in an introductory course in Psychology, Sociology, Anthropology, Economics or Political Science (may be taken concurrently). Recommended: Reading and Writing - 1 level prior to transfer. Hours: 90 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, BEHS B5. BC GE B.2; CSU GE B.4, IGETC 2A.

PSYC B6 Research Methods for the Behavioral and Social Sciences (4 units)
Emphasis is on behavioral and social science research processes and methods including: problem definition and hypothesis formation, research design, ethical treatment of participants, data collection and analysis, application of statistical software, and professional report writing. Students will collect and analyze data from both experimental and non-experimental research methods. Prerequisite: PSYC B5 or SOCI B1 with a grade of “C” or better. Recommended: Reading and Writing - 1 level prior to transfer. Hours: 54 lect, 54 lab. CCS: Liberal Arts and Sciences. Transferable: CSU and private colleges. BC GE B.2.

PSYC B20 Social Psychology (3 units)
Examines the effects of social influences on individual behavior: Including the study of conformity, obedience, persuasion, attitude formation and attitude change. The role of social judgment, aggression, prejudice, prosocial behavior, attraction, and interpersonal relationships are also examined. The scientific method and research strategies in social psychology are employed. Recommended: PSYC B1a or SOCI B1, Reading and Writing - 1 level prior to transfer.
PSYCHOLOGY

PSYC B45 Principles of Learning and Behavior (3 units)
Introduction to basic theories and foundational principles of the experimental analysis of behavior. Emphasis on operant and classical conditioning techniques including habituation, sensitization, reinforcement and punishment. Also covered will be biological basis of learning. Recommended: PSYC B1a with a grade of C or better, Reading and Writing - 1 level prior to transfer. Hours: 54 lect. Offered: S. CCS: Liberal Arts & Sciences. Transferable: CSU and private colleges. Note: elective credit 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 lect. Offered: SS. CCS: Occupational Education. Transferable: CSU and private colleges.

RADT B1b Patient Care (2 units)
Introduction to the basic concepts of patient care in the field of radiography. Instruction and demonstration in aseptic and non-aseptic techniques, infection control, body mechanics, transfer and immobilization techniques, vital signs, oxygen therapy administration, medical emergencies, and contrast media. Prerequisite: Acceptance into the Radiologic Technology Program. Hours: 36 lect. 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, arthrography, bone surveys and bone densitometry with correlated film anatomy. Prerequisites: RADT B1a, RADT B1b and RADT B4b with a grade of “C” or better. These courses are equivalent to completion of the first summer session of the Radiologic Technology Program. Hours: 36 lect, 54 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: RADT B2a and RADT B3a and RADT B4b with a grade of “C” or better. (These courses are equivalent to completion of the first fall semester of the Radiologic Technology Program). Hours: 36 lect, 54 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 the skull, reproductive system, mammography, and related pediatric and geriatric exams, with correlated film anatomy. Prerequisites: Completion of second summer session of Radiologic Technology Program. Hours: 36 lect, 54 lab. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges.

RADT B3a Radiographic Principles 1 (3 units)
Principles of x-ray tube construction, prime exposure factors, beam restriction and scatter radiation, grids, radiographic film, image receptors and intensifying screens, image processing, sensitometry and digital imaging. Prerequisites: RADT B1a and RADT B1b and RADT B4a with a grade of “C or better.” (These courses are equivalent to completion of the first summer session of the Radiologic Technology Program. Hours: 36 lect, 54 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, detail, and distortion. Principles of exposure control systems, mobile radiography, and fluoroscopy. Prerequisites: RADT B2a, RADT B3a, RADT B4b, and RADT B12 with a grade of “C” or better. These courses are equivalent to completion of the first fall semester of Radiologic Technology Program. Hours: 36 lect, 54 lab. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges.

RADT B4a Introduction to Clinical Education (1.5 units)
Orientation to clinical education including introduction to patient transportation techniques, image processing, patient registration and file room, equipment orientation and safety training. Observation and introduction to basic radiographic procedures stressing radiation safety and protection. Prerequisites: Acceptance into the radiologic technology program. Hours: 94 clinical. 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: 256 clinical experience. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges.

RADT B5 Radiation Physics (3 units)

RADT B6 Clinical Education 2 (4 units)
Supervised clinical experiences are provided to perfect skills in a variety of basic 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. Prerequisite: Completion of first semester of Radiologic Technology Program. Hours: 256 clinical experience including film critique. Offered: S. CCS: Occupational Education. Transferable: CSU and private colleges.

RADT B7 Clinical Education 3 (6.5 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: 18 lect, 382 clinic. 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: Current enrollment in the Radiologic Technology Program or evaluation of student’s imaging skills. Hours: 54 lect. Offered: S. CCS: Occupational Education. Transferable: CSU and private colleges.

RADT B10 Clinical Education 4 (6.5 units)
Supervised clinical experiences are provided in advanced radiographic and fluoroscopic 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 B2e. Prerequisite: Completion of second summer session of Radiologic Technology Program. Hours: 384 lect/clinic hours including film critique. Offered: F. CCS: Occupational Education. Transferable: CSU and private colleges.

RADT B11 Radiographic Pathology (2 units)

RADT B12 Radiobiology and Radiation Protection (2 units)
Fundamental concepts of radiobiology including interactions of matter, biological effects on living cells and organ systems, radiation quantities and units, filtration, radiation monitoring,
RADIOLOGIC TECHNOLOGY

RADT B13 Clinical Education 5 (8 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. Hours: 464 clinical experience. Offered: S. CCS: Occupational Education. Transferable: CSU and private colleges.

RADT B30 Principles of Venipuncture (1 unit)

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: 45 lect, 18 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

REAL ESTATE
See Business Administration

REGISTERED NURSING
See Nursing

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: B1a: RUSS B1a. Recommended: Reading - 1 level prior to transfer. Hours: B1a: 54 lect; B1b: 54 lect; B1ab 90 lect. Offered: F, S.

CCS: Liberal Arts and Sciences. Transferable: UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 6.

SOCIOLOGY

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

SOCI B1 Introduction to Sociology (3 units)
The scientific study of human social behavior: This assumes that external forces shape individual behavior. The focus of this perspective is to identify, explain, and interpret these forces. As such, essential concepts, research methods, social institutions, and applications essential to the sociological perspective are examined. Recommended: Reading and Writing - 1 level prior to transfer. Hours: 54 lect. Offered: F, S, SS. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE D.2; CSU GE D.0; IGETC 4.

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 and also stress and mental illness. Recommended: Reading and Writing - 1 level prior to transfer. Hours: 54 lect. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE D.2; CSU GE D.0; IGETC 4.

SOCI B20 Social Psychology (3 units)
Examines the effects of social influences on individual behavior: Including the study of conformity, obedience, persuasion, attitude formation and attitude change. The role of social judgment, aggression, prejudice, prosocial behavior, attraction, and interpersonal relationships are also examined. The scientific method and research strategies in social psychology are employed. Recommended: SOCI B1 or PSYC B1a, Reading and Writing - 1 level prior to transfer. Hours: 54 lect. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: UC, CSU and private colleges. BC GE D.2; CSU GE D.0; D.9; IGETC 4. Note: Not open to students who have taken the equivalent course, PSYC B20.

SOCI B21 Special Projects/Sociology (1 unit)
Student development and completion of an original Sociological research project and/or provide assistance with an existing research project. Course may also include student presentation of research findings. Recommended: Completion of at least one introduction level sociology course or higher and evaluation by instructor; Reading and Writing - 1 level prior to transfer. Hours: 18 lect. Repeat: 3, or until a maximum of 4 units is reached. CCS: Liberal Arts and Sciences. Transferable: CSU and private colleges.
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 and Writing - 1 level prior to transfer. **Hours:** 54 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, CHST B36. BC GE D.2; CSU GE D.3, D.0; IGETC 4.

SOCI B36 Sociology of the Chicano (3 units)
Historical review of the sociocultural and cultural characteristics of Chicanos in the United States. Focus is on the inter-relationships of Chicanos and the society including their immigration history, acculturation, assimilation, minority status, and their cultural change, by generation status. **Recommended:** Reading and Writing - 1 level prior to transfer. **Hours:** 54 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, CHST B36. BC GE D.2; CSU GE D.3, D.0; IGETC 4.

SOCI B45 Minority Relations (3 units)
Examination of the relationships among dominant and minority groups and related concepts and theories: review of the immigration of Northwestern Europeans, Southeastern Europeans, Asians, and North and South Americans, and resultant social patterns reflecting their acculturation and structural assimilation. Those experiences unique to African Americans, women, and religious groups are also included. **Recommended:** SOCI B1, Reading and Writing - 1 level prior to transfer. **Hours:** 54 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. **Note:** Not open to students who have taken the equivalent course, HMSV B45. BC GE D.2; CSU GE D.3, D.0; IGETC 4.

SOIL
*See Agriculture*

SONOGRAPHY
SONO B50 Ultrasound Physics and Instrumentation (3 units)
Basic principles of ultrasound physics and machine operation. This course includes the following: physics of sound, propagation of sound in tissue, transducers, Doppler principles, beam formation, transmission and modification, artifacts, biologic effects of ultrasound and quality assurance methods. Image acquisition, processing and storage will also be covered. Laboratory sessions with practice on tissue equivalent ultrasound phantoms. **Recommended:** MATH BD/B200D, BIOL B18, MEDS B60 with a grade of C or better. **Hours:** 45 lect, 9 lab. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

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. Students will develop all language skills that include reading, writing, listening comprehension and oral production. **Recommended:** Reading - 1 level prior to transfer and SPAN B1a or equivalent for SPAN B1b. **Hours:** 90 lect. **Offered:** F, S, SS. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 4.

SPAN B2ab Elementary Spanish (5 units)
This course continues using the “planned immersion approach” begun in SPAN B1ab. It explores new tenses and moods of the language and continues vocabulary enhancement, development of oral production and writing, integrating aspects of the Spanish culture. **Recommended:** The students need to have the knowledge equivalent to SPAN B1ab with a grade of “C” or better. **Hours:** 90 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; IGETC 4.

SPAN B3 Intermediate Spanish (4 units)
Intensive grammar review of the Spanish language, supplemented with reading selections of Spanish and Latin American authors with the purpose of nourishing an understanding of the Spanish culture. **Recommended:** Knowledge equivalent to SPAN B2ab with a minimum grade of “C” or better. Students in this course should have studied the conjugations of the present indicative and the present subjunctive, the preterite and the imperfect, the direct and indirect object pronouns in addition to basic Spanish vocabulary and expressions. **Hours:** 72 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 3.B, 6.

SPAN B4 Intermediate Spanish (4 units)
Continued advanced readings from Spanish and Latin American authors, and continued intensive grammar review of the Spanish language preparing students for upper division work in literature and language. **Prerequisite:** SPAN B3 with a grade of C or better or knowledge equivalent to the completion of SPAN B3. **Hours:** 72 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.2; IGETC 3.B, 6.

SPAN B10 Spanish for Heritage Speakers (4 units)
This course is designed for students whose native language is Spanish but need to improve their writing, grammar, vocabulary, and spelling skills. Strong emphasis will be placed on punctuation, accent rules, composition, grammar, vocabulary and reading. The course is taught entirely in Spanish. **Recommended:** Native speaker or equivalent. **Hours:** 72 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:**
SPANISH

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 with a grade of C or better. Hours: 54 lect for each 2 unit course. Repeat: 1. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: Not degree applicable.

SPECIAL STUDIES

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. Hours: 9 lect/disc for each 0.5 unit. 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 regularly 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. Hours: 24 arranged for each 0.5 unit. Field trips may be required. Repeat: 1 or until a limit of 4 units is reached. CCS: Liberal Arts & Sciences. Transferable: 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. Hours: 54-108 lab by arrangement. Field trips may be required. Repeat: 1 or until a limit of 4 units is reached. CCS: Liberal Arts & Sciences. Transferable: 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. Hours: 18-54 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. Hours: 54-162 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)

SPEECH

See Communication

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 the Associate’s Degree. Satisfies the 0.5 unit educational planning requirement for graduation from Bakersfield College. Required for both the A.A. and A.S. degrees. Recommended: Reading - 1 level prior to transfer. Hours: 9 lect. Offered: F, S. CCS: Liberal Arts & Sciences. Transferable: CSU and private colleges. Note: Not open to students who have taken the equivalent course, STDV B201.

STDV B2 Career Decision Making/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 research in the job market. Satisfies the 0.5 unit educational planning requirement for graduation from Bakersfield College. Recommended: Reading - 1 level prior to transfer. Hours: 27 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 B202.

STDV B3 Career, Life, and Educational Planning (3 units)
Designed to assist students with self-exploration, career transitions and career-life planning in order to achieve success
in a diverse society. Critical thinking skills will be utilized through a systematic approach to career development by examining values, interests, skills, life roles, personality type, personal self-management, decision-making and goal-setting throughout the life span. Students will develop educational options, possible career pathways and majors, and a student educational plan. Job search strategies and resume writing will be introduced. Satisfies the 0.5 unit educational planning requirement for graduation from Bakersfield College.

**Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** CSU and private colleges. Elective credit only. CSU GE E.

**TECHNICAL MATHEMATICS**

**TECM B52 Introduction to Technical Mathematics (3 units)**
Elementary course in mathematics intended primarily for technology majors covering arithmetic processes, ratio, proportion, elementary algebra, geometric forms and construction, and elementary trigonometry. **Hours:** 54 lect. **CCS:** Occupational Education. **Not Transferable:** Not degree applicable.

**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 - 1 level prior to transfer. **Hours:** 54 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.1.

**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 - 1 level prior to transfer. **Hours:** 54 lect. **Offered:** F, S. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.1.

**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 - 1 level prior to transfer. **Hours:** 54 lect. **Offered:** F. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.1.

**THEA B12a Introduction to Shakespeare (3 units)**
Examination of Shakespeare’s use of verse, scansion, imagery, developing style, and theatre. Emphasis is on the reading of four representative plays. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 54 lect. **Repeat:** 3. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.1; IGETC 3.A.

**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 - 1 level prior to transfer. **Hours:** 54 lect. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.1; IGETC 3.A.
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 - 1 level prior to transfer. **Hours:** 54 hours per unit. **Offered:** F. S. **Repeat:** 3. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.1.

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 - 1 level prior to transfer. **Hours:** 54 hours for each 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. Note: Elective credit only. BC GE C.

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 - 1 level prior to transfer. **Hours:** 18 lect. **Repeat:** 3. **CCS:** Liberal Arts and Sciences. **Transferable:** CSU and private colleges. **Note:** Elective credit only. BC GE C.

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 - 1 level prior to transfer. **Hours:** 54 lect/disc. **Offered:** F. **Repeat:** 1. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.1; IGETC 3.A.

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 - 1 level prior to transfer. **Hours:** 54 lect. **Offered:** S. **Repeat:** 1. **CCS:** Liberal Arts & Sciences. **Transferable:** UC, CSU and private colleges. BC GE C; CSU GE C.1; IGETC 3.A.

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 - 1 level prior to transfer. **Hours:** 60 for each 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. BC GE C; CSU GE C.1.

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 - 1 level prior to transfer. **Hours:** 60 for each 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. BC GE C.

VOCATIONAL ENGLISH AS A SECOND LANGUAGE

VESL B82 Beginning Vocational ESL (2 units)
Beginning Vocational ESL multi-skill (reading, writing, listening, and speaking) course with a focus on vocabulary used in the agricultural workplace. Focuses on workplace oral communication, reading and writing tasks. **Prerequisite:** Placement based on the CASAS listening and reading pre-test. **Hours:** 64 lect. **CCS:** Precollegiate-Basic Skills. **Not Transferable:** Not degree applicable.

VESL B83 Intermediate Vocational ESL (2 units)
Intermediate vocational ESL multi-skill course with a focus on vocabulary used in the agricultural workplace. Focuses on workplace oral communication, reading and writing tasks. CASAS certification upon completion. **Prerequisite:** VESL B82 with a grade of C or better or placement based on the CASAS listening and reading pre-test. **Hours:** 64 lect. **CCS:** Precollegiate-Basic Skills. **Not Transferable:** Not degree applicable.

VESL B84 High-Intermediate/Advanced Vocational ESL (2 units)
High-intermediate/advanced vocational ESL multi-skill course with a focus on vocabulary used in the agricultural workplace. Focuses on workplace oral communication, reading and writing tasks incorporating CASAS content and competency areas, and meeting the SCANS guidelines. CASAS certification upon completion. **Prerequisite:** VESL B83 or ENSL B80 with a grade of C or better or placement based on the CASAS listening and reading pre-test. **Hours:** 64 lect. **CCS:** Precollegiate-Basic Skills. **Not Transferable:** Not degree applicable.

VOCATIONAL NURSING
See Nursing, Vocational

WATER TECHNOLOGY

WRTT B51 Basic Water Treatment (3 units)
Prepares the beginning level student for the lower level California Department of Health Services (CA/DHS) Water Treatment Operator Certification (grades 1 and 2) and to inform the interested public in the science and technology involved in the purification of drinking water. **Hours:** 54 lect. Field
trips required. **Offered:** F. **CCS:** Occupational Education. **Not Transferable:** Associate degree only.

**WRT B52 Basic Water Distribution (3 units)**
Prepares the beginning level student for the lower level CA/NV AWWA (grade 1) and/or CA/DHS (grades 1 and 2) Water Distribution Operator Certification and to inform the interested public in the science and technology involved in the purification of drinking water. **Hours:** 54 lect. Field trips required. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**WRT B53 Water and Wastewater Analysis (3 units)**
Prepares the student to take California SWRCB, grades 1 and 2, Waste Water Operation exam. Covers environmental influences, composition of natural water, analysis, interpretation of results and application to treatment problems. **Recommended:** High School CHEM or job related experience, Reading - 1 level prior to transfer. **Hours:** 54 lect. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate degree only.

**WRT B61 Advanced Water Treatment (3 units)**
Prepares the advanced level student for upper level California Department of Health Services (CA/DHS) Water Treatment Operator Certification (grades 3 through 5) and to inform the interested public in the science and technology involved in the purification of drinking water. **Prequisite:** Completion of Basic H20 treatment or comparable course. **Hours:** 54 lect. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**WRT B62 Advanced Water Distribution (3 units)**
Prepares the advanced level student for upper level CA/NV AWWA (grades 2 through 4) and/or CA/DHS (grades 3 through 5) Water Distribution Operator Certification and to inform the interested public in the science and technology involved in the distribution of drinking water. **Prequisite:** Must have completed a basic water distribution course acceptable to Bakersfield College or the instructor, with a minimum of 36 hours. **Hours:** 54 lect. Field trips required. **CCS:** Occupational Education. **Not Transferable:** Associate degree only.

**WELDING**

**WELD B1a Introduction to Oxygen Acetylene Welding and Cutting (2 units)**
Properties and characteristics of metals. Safety, theory, and practical experience in oxy-acetylene welding, cutting, and joint design, codes and weld testing. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 27 lect, 27 lab. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Elective credit only.

**WELD B1b Introduction to the Welding Processes (2 units)**
Properties and characteristics of metals and a survey of welding processes. Safety, theory, and practical experience in shielded metal arc, PAC, MIG, TIG, FCAW, Shear & Brake, joint design, codes and weld testing. **Recommended:** Reading - 1 level prior to transfer. **Hours:** 27 lect, 27 lab. **Offered:** F, S. **CCS:** Occupational Education. **Transferable:** CSU and private colleges. **Note:** Elective credit only.

**WELD B53a Shielded Metal Arc Welding (2 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 - 1 level prior to transfer. **Hours:** 27 lect, 27 lab. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**WELD B53b Shielded Metal Arc Welding (2 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 - 1 level prior to transfer. **Hours:** 27 lect, 27 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 - 1 level prior to transfer. **Hours:** 54 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. **Recommended:** WELD B54a with a grade of C or better, Reading - 1 level prior to transfer. **Hours:** 54 lect. **Offered:** S. **Repeat:** 1. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**WELD B55a Structural Plate Certification (2 units)**
Safety, introduction to welding codes, welding discontinuities and practical welding. Experience on plate with SMAW (shielded metal arc welding) or FCAW (flux core arc welding), based on the American Welding Society DI.1 structural code. Weld 3/8” plate in 1G, 2G, 3G, & 4G fixed position for certification. **Recommended:** WELD B55a with a grade of C or better or three years work experience as a welder; Reading - 1 level prior to transfer. **Hours:** 27 lect, 27 lab. **Offered:** F, S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

**WELD B55b Structural Plate Certification (2 units)**
Safety, introduction to welding codes, welding discontinuities and practical welding. Experience on plate with SMAW (shielded metal arc welding) or FCAW (flux core arc welding), based on the American Welding Society DI.1 structural code. Weld 1” plate in 1G, 2G, 3G, & 4G fixed position for
COURSE DESCRIPTIONS

WELDING

Introduction to welded metal fabrication. Safety related to welding and fabrication tools and equipment. Emphasizes layout, cutting, shaping, forming and welding structures together. Calculating material and labor costs will be covered as well. Recommended: Reading - 1 level prior to transfer.

Hours: 27 lect, 27 lab. Offered: F, S. CCS: Occupational Education. Not Transferable: Associate Degree only.

WELD B65ab Welded Steel Structures (1.5-1.5 units)

Introduction to welded metal fabrication. Safety related to welding and fabrication tools and equipment. Emphasizes layout, cutting, shaping, forming and welding structures together. Calculating material and labor costs will be covered as well. Recommended: Reading - 1 level prior to transfer.

Previous class or experience in oxy-fuel cutting, shielded metal arc welding, and gas metal arc welding is also recommended.

Hours: 27 lect, 81 lab. CCS: Occupational Education. Not Transferable: Associate Degree only.

WELD B90 General Welding (6 units)

Theory and application of GTAW (Gas Tungsten Arc Welding) & FCAW (Flux Core Arc Welding) welding processes. Emphasizes safe and proper operation of these welding processes while welding on mild steel. Recommended: WELD B1b or WELD B53a with a grade of C or better or one year work experience as a welder; Reading - 1 level prior to transfer.

Hours: 27 lect, 27 lab. Offered: F. CCS: Occupational Education. Not Transferable: Associate Degree only.

WELD B74a Introduction to GTAW (Gas Tungsten Arc Welding) (2 units)

Theory and application of GTAW (Gas Tungsten Arc Welding) welding process. Emphasizes safe and proper operation of this welding process while welding on mild steel, aluminum, and stainless steel. Recommended: WELD B1a or WELD B53a with a grade of C or better or one year work experience as a welder; Reading - 1 level prior to transfer.

Hours: 27 lect, 27 lab. Offered: F. CCS: Occupational Education. Not Transferable: Associate Degree only. Note: Not open to students who have taken WELD B74ab.

WELD B74b Introduction to GMAW (Gas Metal Arc Welding) and FCAW (Flux Core Arc Welding) (2 units)

Theory and application of GMAW (Gas Metal Arc Welding) & FCAW (Flux Core Arc Welding) welding processes.

Hours: 27 lect, 27 lab. Offered: F. 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 Introduction to Woodworking Technologies (3 units)

Basic woodworking processes related to industry technology processes to include use and care of machine and hand tools, safe machine and tool use, wood finishing, lathe operation and processes, lamination techniques, woodcarving, and other specialized areas of woodworking technology. Students will create a scope of work for each 8-week segment of the semester. May be transferable as an elective. Recommended: Reading - 1 level prior to transfer.


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 preparations, gluing, clamping and assembly are emphasized. Recommended: Reading - 1 level prior to transfer.

Hours: 27 lect, 81 lab. Offered: F. Repeat: 1. CCS: Occupational Education. Transferable: CSU and private colleges. Note: Elective credit only.
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. Material fee: $40.00 for lumber, hardware (if applicable), and finishing products, etc. **Recommended:** WOOD B2 with a grade of “C” or better or evaluation by instructor of student’s woodworking skill sets. **Hours:** 27 lect, 81 lab. **Offered:** S. **Repeat:** 1. **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, melamine, high density particle board, as well as others. Advanced bidding techniques are discussed. Material fee: $40.00 for project materials (glue, hardware, dowels, biscuits, and finishing products). Excludes lumber. **Prerequisite:** WOOD B5 with a grade of “C” or better or evaluation by instructor of student’s cabinetmaking skills. **Hours:** 27 lect, 81 lab. **Repeat:** 3. **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. Material fee: $40.00 for project materials (glue, hardware, dowels, biscuits, and finishing products). Excludes lumber. **Prerequisite:** WOOD B65a with a grade of “C” or better or evaluation by instructor of student’s cabinetmaking skills. **Hours:** 36 lect, 72 lab. **Repeat:** 3. **Offered:** S. **CCS:** Occupational Education. **Not Transferable:** Associate Degree only.

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

WEXP B248 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. **Prerequisites:** Declared major or occupational goal, concurrent enrollment in seven or more units (including CWEE units, except summer school) and evaluation of student’s qualifications and objectives. **Hours:** 75 hours per semester unit at a paid job: 60 hours per semester 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 B249 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 of student’s qualifications and objectives. **Hours:** 75 hours per semester unit at a paid job: 60 hours per semester 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 B250 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 experience 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 of student’s planned work experience program, qualifications and objectives. **Hours:** 75 hours per semester unit at a paid job: 60 hours per semester 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.
Glossary
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**: Degree granted by California Community Colleges.

**A.S., Associate in Science**: Degree granted by California Community Colleges.

**A.A.-T., Associate in Arts for Transfer**: Degree granted by California Community Colleges.

**A.S.-T., Associate in Science for Transfer**: Degree granted by California Community Colleges.

**Academic Disqualification**: Students are placed in this status after being on probation for three consecutive semesters. They can only be readmitted by petition.

**Academic Probation**: Status of students who have cumulative GPAs below 2.00. A meeting with a counselor is required to register for any future semester.

**Articulation**: Articulation agreements identify specific courses or sequences of courses at one institution that are considered comparable to, or acceptable in lieu of, a course or course sequence at another institution.

**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.

**ASSIST**: ASSIST is a computerized student-transfer information system that can be accessed over the World Wide Web (http://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.

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

**C-ID**: Course Identification Numbering System. A lower-division, transferable course commonly articulated between the California Community Colleges and the California State Universities and the Universities of California.

**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.

**Certificate of Achievement**: A certificate of achievement is awarded for the completion of a formal instructional program, with a minimum of 18 units, which is designed to give the learner the skills, knowledge and attitudes required for a specific field or endeavor.

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

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

**Credit Course**: Courses for which units are granted.

**Curriculum Advising and Program Planning (CAPP)**: A degree audit program that checks a student’s progress against a program of study and generates a report.

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

**Extended Learning (formerly Distance Learning)**: Instruction in which the instructor and student are separated by distance and interact through the assistance of communication technology. Courses offered via non-traditional mode of delivery, either: Online (Internet), Interactive (2-way video/2-way audio between multiple sites), or Hybrid (a combination of technology assistance instruction and traditional on-campus sessions).

**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.

**Hybrid Course**: A course utilizing more than one mode of instructional delivery. Instruction may be delivered by such modes as, for example, the Internet, email, video, and the classroom.

**Interactive**: Courses taught ‘real-time’ electronically “Face to Face” via 2-way video/2-way audio system from the main BC campus to remote sites such as the Bakersfield College Delano Center, Porterville and Cerro Coso.

**Job Skills Certificate**: The Job Skills Certificate (less than 18 units) document the satisfactory completion of training in a specific area of study.
**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.

**Matriculation:** A process to assist students in attaining their educational goals consisting of orientation, assessment, counseling and student educational plans.

**Minor:** The field of study a student plans to pursue in addition to the major but with less emphasis (usually 4-6 classes). A minor is not offered at Bakersfield College.

**Non-Credit (ungraded) Course:** Course for which no units are given. Restricted generally to tutoring, senior adult and parent education programs.

**Online:** Courses delivered via the Internet. Students must have access to a computer and Internet Service Provider (ISP) with an e-mail address. Online courses allow students to attend class “anytime, anywhere.” Course content and requirements are the same as traditional Face To Face (F2F) courses on the main campus.

**Open Entry/Open Exit:** Open entry/open exit allows 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.

**Orientation:** Orientation is recommended for all new students and should be done before assessment testing.

**Pass No-Pass Grading:** A grading system allowing a course to be taken for a grade of Pass No-Pass rather than for a letter grade of A, B, C, D, F.

**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. Prerequisites are expressed as minimum requirements. For example, with a grade of “C” means that a grade of “C” or higher is acceptable. All prerequisites may be challenged and may be waived if the challenge is upheld. See the Dean of Students for specific information and procedures.

**Progress Disqualification:** Status of students with 50 percent or more of their units with grades of W, I, or NC for three consecutive semesters. Students can only be readmitted by petition.

**Progress Probation:** Status of students with 50 percent or more of their units with grades of W, I, or NC. Students must see a counselor before they can register for a future semester.

**Recommended:** If a course has “recommended preparation” it means that it is possible, but difficult, to successfully complete the course without the recommended preparation.

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

**Student Educational 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.

**Transcript (of Record):** Copy of student’s college record prepared by the Admissions and Records Office.

**Update:** Students must update their basic information before they can register for any semester. This can be done in the Counseling Office, at the Delano Community Campus, or on the web at BakersfieldCollege.edu.

**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.
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and
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ADMINISTRATION AND FACULTY

ADJUNCT FACULTY
Instructors who have taught for Bakersfield College over the past year.

Achere, Julius
Health Education
Aiello-Wise, Kathy
Child Development
Albertson, Kevin
Public Safety
Alexander, Jacen
English
Alexander, Sean
Physical Education
Allard, Roy
Engineering & Industrial Technology
Allen, Scott
Nursing
Amstutz, Jan
English as a Second Language
Andersen, Glenn
Communication
Andersen, Jens-Aref
Engineering & Industrial Technology
Anderson, Robin
Nursing
Ansolabehere, Paul
Animal Science
Armendariz, Bonnie
Business Management & Information Technology
Atkinson, Amber
Physical Education
Ayers, Kenneth
Radiologic Technology
Baker, Linda
Anthropology
Baltis, Heather
Agriculture
Barnett, Lisa
Radiologic Technology
Barrett, Jerome
Communication
Bart, Cindie
American Sign Language
Beckwith, Ryan
Physical Education
Bellah, Mary
Music
Bianco, Donna
Nursing
Boone, Timothy
Nursing
Boyd, Susan
History
Bowles, Christopher
Fire Technology
Brackley, Joseph E.
English
Bradford, Jesse
Social Science
Braun, Mary
English
Brian, Cameron
Art
Brooks, Johnathan
Communication
Brown, Danny
Fire Technology
Brown, Sharon
Child Development
Bruce, Kathleen
Nursing
Bryan, Rosabelle
Nursing
Bsharah, Steve
History
Buckey, Bryan
American Sign Language
Buis, Kerrie
English
Bunting, Gaye C.
Health Education
Burgess, Ellery
Business Administration
Burich, Theresa
Medical Science
Burke, Daniel
Psychology, Child Development
Burton, Brent
Emergency Medical Technology
Bush, David
History
Butcher-Fabiola
Communication
Butterfield-Davis, Kathryn
Theatre Arts
Calderon, Santiago
Foreign Language
Canso, Raymond
Nursing
Carlson, Kamala
Academic Development
Carmona, Richard
Mathematics
Cervantes, Elizabeth
Music
Chapman, William
Academic Development
Chavez, Aaron
Physical Education
Chupa, Vicki
Nursing
Citialian, Noelia  
*Nursing*

Clark, Brett  
*Physical Education*

Coffman, Patti  
*Special Studies*

Cohen, Mark  
*Fire Technology*

Constantine, Matthew  
*Family and Consumer Education*

Communication  

Courtney, Houston  
*Physical Education*

Cummings, Nakysha  
*Counseling*

Denison, Debra  
*Communication*

Derosia, Mark  
*Behavioral Science*

Dethlefson, James  
*Music*

Diaz, Victor  
*Cooperative Education*

Dickinson, Nathan  
*Nursing*

Diskin-Mattison, Mary  
*Business Management & Information Technology*

Dison, Christopher  
*English*

Dixon, Jennifer  
*Nursing*

Dodgin, Dustin  
*Communication*

Donahue, James  
*English as a Second Language*

Donev, Stefan  
*Communication*

Doty, Kristy  
*Nursing*

Draudker, Esther  
*Anthropology*

Dupree, Michael  
*English*

Ennis, Betty  
*Nursing*

Escudero, Antonio  
*Foreign Language*

Espinoza, Frank  
*Psychology, Sociology*

Estill, Kristine  
*Biology*

Fagans, Michael  
*Communication*

Falconer, Kaye  
*English*

Feer, Charles  
*Correctional Administration*

Fenton, Gregory  
*Architecture*

Ferris, Douglas  
*Business Management and Information Technology*

Fillbrandt, Jeanne  
*Mathematics*

Fivecoat, Charles  
*Social Science*

Flachmann, Christopher  
*Behavioral Science*

Flad, Clayton  
*Fire Technology*

Forbes, Judy  
*Public Safety*

Frailey, Philip  
*Accounting*

Freeland, Kathleen  
*Social Science*

Freeman, Julie  
*Nursing*

Garaygordobil, Eugenio  
*Communication*

Garcia, Olivia  
*Cooperative Education*

Garcia-Guerras, Maria  
*Foreign Language*

Gardner, Jennifer  
*Social Science*

Garone, Cheryl  
*Family and Consumer Education*

Girade, Amy  
*Anthropology*

Given, Kirk  
*History*

Gonzales, Rex  
*Psychology*

Gonzalez, Maria  
*Family & Consumer Education*

Graf, Roger  
*Physical Science*

Graupman, Gary  
*English*

Grewal, Gurpreet  
*Mathematics*

Griebling, Graciela  
*English*

Grimsley, Douglas  
*Political Science*

Grisham, Beckie  
*Physical Education*

Gude, Gail  
*English*

Haizlip, Donnasue  
*Nursing*
Haas, Karl
Music

Harte, John
Journalism

Hartley, Tyler
Fire Technology

Harvey, Dennis
Physical Science

Heasley, Timothy
Music

Hedlund, Robert
Fire Technology

Heikkinen, Deanna
Social Science

Hill, Aimee
Communication

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Mathematics

Holland, Carole
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Horton, Angela
Art

Hubble, Erick
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History

Hunt, Kristina
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Hunter, Harlan
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Imel, James
History

Ingram, Raymond
Family and Consumer Education

Jensen, Donna
Child Development

Jones, Matthew
Physical Education

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Business Management and Information Technology

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Nursing

Kelly, Tamee
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Kelson, Susan
Nursing

Kirchner, Ernest
English

Klinoff, Robert
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Knabe, Ronnie
Nursing

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Health Education

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Lamers, Heather
English

Landgraff, Nina
Art

Langham, Susanne
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Laven, Anna
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Mathematics

Lewy, Robert M.
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Lightsey, David
Nutrition

Livesey, Jared
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Loken, Alisha
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Lorimer, Brittany
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Lundquist, Gene
Physical Education

Lyman, Margaret
Foreign Language

Lynde, Tamara
English

Lynott, Therese
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Madani, Behrang
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Madruga, Jennifer
Nursing

Maguire, Toby
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Maraccini, Richard R.
Sociology

Markiewicz, Dana
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Marion, Courtney
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Marquez, Marisa
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English

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Meier, Terry  
ESL Placement Reader

Meyer, Cari  
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Geography

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Nutrition

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Monroe, Terrance  
History

Moore, Vicki  
Music

Moretti, Kathy  
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Economics

Mount, Tim  
Communication

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Counseling

Navarro, Manuel  
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Neal, Cheryl  
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Neville, David  
Spanish

Newton, Joe  
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Oblonsky, Megan  
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Ortega, Jesse  
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Orton, Neil  
Communication

Pailet, Robert  
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Peet, Laura  
English

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Biology

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Ponec, Patrick  
Fire Technology

Pontes, Matthew  
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Pophal, Lee  
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Popichak, Michael  
Water Technology
Porfiri, Karen
Education
Powell, James
Fire Technology
Preston, Karen
Medical Science
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Human Services
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Sanchez, Robert
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Scaffidi, Susan
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Skibinski, John
Forestry
Slaybaugh, Rob
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Physical Science
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English
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Forestry
Smith, Patricia
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Stanifer, Neal
English
Stanton, David
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Suderman, David
Academic Development
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Tedrow, Lea
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Thomas, Evelyne
Dance
Thompson, Don
English
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Anthropology
Thorson, Andrea
Communication
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Communication
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Communication
Tiner, Kristoffer
Music
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Vasquez, Veronica
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Villalovos, Gail
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Webster, Stephanie
Biology
Wesolick, Duane
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White, Dawn
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Whitaker, William
Mathematics
Willis, Gayle
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Wilson, Samuel
Architecture
Wulff, Charles
Water Technology
Young, Gail
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Young, Jeanne
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Young, Kathryn
Family and Consumer Education
Zavala, Davin
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Zuniga, Patrick
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Appel, Jacqueline
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Arakelian, Margaret
Health Careers

Benston, Carol
English

Benston, Richard
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Bihlman, Georgene
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Blunt, Marlene
Physical Education

Bonner, Frederick
Industrial Education

Bowers, Sandra
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Bowser, Carl
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Health Careers

Bracke, Victor
Art

Bradford, Jesse J.
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Briggs, Sally M.
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Brigham, Jack
History and Political Science

Bright, Larry K.
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Brommelsiek, Patricia
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Brooks, Dale W.
Music

Buckley, Margaret
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Burr, Arnold H.
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Carden, James F.
Counseling

Clark, James F.
Family & Consumer Education

Clark, Lucy G.
Family & Consumer Education

Clark, Nancy
Family & Consumer Education

Clark, Oreil Louise
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Collins, John J.
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Collins, Pansy
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Collis, Gerry
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Conner (McGowan), Patricia
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Copelin, Mary Helen
Speech

Corser, Caroline
Learning Center

Cory, Wallace E.
Social Science

Covey, Robert L.
Health & Physical Education

Cox, Gary E.
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Cunningham, Carol A.
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Dabbs, Lowell P.
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Damron, Duane
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Davidson, Robin
Mathematics

Davis, Alvin D.
Art

Davis, Earlene
Nutrition, Family & Consumer Education

Davis, Thomas H., III
Social Science

Day, Robert
Maintenance and Operations

DeLeon, Sheran
Allied Health

Dethlefson, Ronald
Speech

Dhariwal, Mita
Sociology

Dietz, Robert C.
Chemistry

Diskin-Mattison, Mary
Business Management & Information Technology
Dooley, Duane
Engineering & Industrial Technology

Draper, Ray E.
Life Science

Edgmon, Sharon J.
Mathematics

Edwards, Nancy Joan
English

Ewing, John L.
Mathematics

Fahsbender, Kenneth E.
Administration

Fanucchi, Larry
Engineering & Industrial Technology

Finch, Bill
Physical Education

Flaming, Robert
Engineering & Industrial Technology

Fleenor, Terry
English

Funk, Robert
Architecture/CAD

Garrett, Clifton
Foreign Language

Garrett, Judith P.
Foreign Language

Gilman, Edith
Allied Health

Glessner, Faye
Business Management & Information Technology

Goodwin, Gregory L.
History, Political Science

Gordon, Helen Heightsman
English, Counseling

Grider, Dallas E.
Health and Physical Education

Grogan, Darlene
Allied Health

Hageman, Edgar J.
Engineering & Industrial Technology

Hale, Stephanie
Academic Development

Haner, Jerry L.
Business Management & Information Technology

Haslett, Donald R.
Public Service

Haycock, Lawrence K
Agriculture

Helmstedter, Warren
Business Management & Information Technology

Hench, Irene E.
Library

Hernandez, Jack
Philosophy, Administration

Higgins, Eloise
Family & Consumer Education

Hill, Sally F.
Psychology

Hilton, Sybil P.
Physical Education

Honig, Sasha
History

Horwege, Henry
English

Howard, Evan D.
English

Howard, Paul M.
Administration

Hullett, Phyllis
Student Services

Hurlbert, Emily
Academic Development

Jacobson, Lavonda
Nursing

Janeway, Miriam
English

Johnson, Catherine C.
Mathematics

Johnson, Donald
Supportive Services

Johnson, Jane P.
Academic Development, German

Johnson, Walter
Physical Education

Jones, Carl
Automotive Technology

Kellogg, Carolyn
Nursing

Kelsey, Richard
Counseling

Keranen, David M.
Mathematics

Kimler, Tom
Physical Science

Kirchner, Eugene
Physical Science

Kirkland, Olin
Business Management & Information Technology

Krafve, Ralph E.
Physical Education

Lackey, Robert
Electronics

Landon, Norma K.
Health Careers

Lango, Peter M., Sr.
Physical Education

Larsen, Claire J.
Administration

Lee, Patricia
Physical Science

Lewis, Gaylen G.
Social Science
Lockford, Joyce C.  
*English*

Logan, Carolyn P.  
*Business Management & Information Technology*

Loken, Herbert L.  
*Physical Education, Athletics*

Longacre, Arvilla  
*Health Careers*

Ludeke, Jerry L.  
*Academic Development*

Lyman, John C.  
*Physical Science, Geography, Geology*

Lyman, Margaret  
*Foreign Language*

Marquez, Fernando  
*Business Management & Information Technology*

Martinez, Alexa C.  
*Allied Health, Behavioral Science*

Mc Kay, Peter B.  
*Economics, Business Management & Information Technology*

McMasters, Ronald  
*Administration*

Meert, Paul  
*Mathematics*

Meier, Bruce N.  
*History, Business Management & Information Technology, Business Law*

Milliken, Yvonne W.  
*Administration*

Moore, Carol A.  
*Business Management & Information Technology*

Moore, George Robert  
*Administration*

Murillo, Daniel J.  
*Counseling*

Naso, Albert  
*Art*

Nelson, William G.  
*Physical Education*

Newton, Joe M.  
*Real Estate*

Nystrom, Daniel R.  
*Life Science*

O’Nesky, Carolyn H.  
*Nursing*

Osterkamp, Dalene M.  
*Art*

Page, Charles  
*Engineering & Industrial Technology*

Palitz, Merriem  
*English*

Parsons, Robert B.  
*Mathematics, Physical Science*

Peterson, Claire A.  
*Counseling*

Pfutzenreuter, Bruce  
*Physical Education*

Phillips, Gene  
*Business Management & Information Technology*

Pollard, Harvel  
*Physical Education*

Poole, E. Donald  
*Physics*

Porter, Joyce  
*Communication*

Prue, Paul  
*Life Science*

Quilling, Howard  
*Academic Development*

Rhea, David  
*Philosophy*

Rice, Norma  
*Allied Health*

Rippey, Clayton  
*Art*

Rodewald, Donald E.  
*News and Publicity*

Robinson, Chalita M.  
*Art*

Romanowich, Christine  
*Nursing*

Rosales, David  
*History*

Rosson, Phillip R.  
*Engineering & Industrial Technology*

Sautter, Lucille M.  
*Classified Personnel Director*

Schiffman, Robert  
*Physical Science*

Self, Mary Anne  
*Administration*

Selby-Dabbs, Phyllis  
*Communication*

Selvera, Frank L.  
*Library*

Semple, Dean  
*Music*

Shaffer, Patrick O.  
*Administration*

Sharpe, Carol  
*Family & Consumer Education*

Sheldon, Harriett  
*Administration*

Sherman, Archible W.  
*Administration*

Silver, A.B.  
*Behavioral Science*

Slate, Allen R.  
*Mathematics*

Stanley, Dorothy  
*Mathematics*

Stansbury, Donald L.  
*English*
Strome, Paula  
Computer Studies
Tatsuno, Marlene  
Art
Tillman, Patricia E.  
Health Careers
Tischbirek, Edwin A.  
Industrial Education
Tolle, Alan E.  
Life Science
Tritten, Betty  
Mathematics
Tuttle, Robert E.  
Engineering & Industrial Technology
Verhine, Clyde E.  
Social Science
Wall, Chuck  
Business Management & Information Technology, Communication
Wall, Wendell Edgar  
Biology
Walker, William W.  
Communication
Ward, Ray M.  
Physical Science
Warren, Harvey  
Counseling
Webber, Elizabet Caroline  
Anthropology
Webster, Persis  
Foreign Language
Webb, Henry R.  
Theatre Arts
West, Charles Edward  
Cooperative Education
Whetsler, Dell V.  
Administration
Wickey, Robert  
Physical Science
Willard, J. David  
English
Williams, Billie E.  
Mathematics
Wilson, Harry S.  
Photography
Worthington, Marilyn  
Family & Consumer Education
Wright, Richard  
Psychology
Wulf, Evelyn M.  
Library