

# Courses

## ACDV - Academic Development Courses

### ACDV B5 Tutor Training and Practicum Level 1

1 unit

Prerequisite: Minimum grade of 'B' in subject to be tutored and approval of subject area instructor and evaluation of prerequisites by the Tutor Trainer and/or Tutor Coordinator.

Recommended: BC placement into reading level 06.

Description: Essential human relations skills and methods of effective tutoring, placing these skills into practice with tutees assigned by the Tutor Coordinator. This course is required for Level 1 International Tutor Training Program Certification (ITTPC). Tutors are referred by subject area instructor(s).

Note: Must have the ACDV B5 instructor's signature to enroll in any ACDV B5 class.

Hours: 18 lecture

Transferable: CSU and private colleges.

### ACDV B5A Tutor Training and Practicum Level 2

.5 unit

Prerequisites: 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: BC Placement into reading level 06.

Description: Designed for returning tutors to build tutoring skills. Skills include essential human relations skills and methods of effective tutoring, placing skills into practice with tutees referred by the Tutor Coordinator. This course is required for Level 2 International Tutor Training Program Certification (ITTPC). Students may be referred by subject area instructor(s).

Hours: 9 lecture

Transferable: CSU and private colleges.

### ACDV B50 Advanced Reading and Critical Thinking

3 units

Prerequisite: BC placement into reading level 05 or successful completion of ACDV B62 or equivalent with a grade of C or better.

Recommended: BC placement into writing level 05 or successful completion of ENSL B51/EMLS.

Description: Recommended for students who have not met the reading competency graduation requirement at entrance or for those who wish to improve their skills in academic reading. Emphasizes critical reading and thinking and reading flexibility with college-level material. Focuses on application, analysis, synthesis, and evaluation in both oral and written form. Successful completion of ACDV B50 meets graduation requirement for reading competency.

Hours: 54 lecture

Transferable: Not transferable. Not degree applicable.

### ACDV B55 First Year Student Success

0.5-2 units

Description: Introduces students to the college's academic, social, and physical environments and promotes personal

and academic locus of control necessary for student success in college. Designed to increase students' probability for college success as students locate, navigate, and utilize the campus' academic and student services resources. The course covers note-taking, test-taking, textbook reading, effective communication, time-management, and library research and other skills necessary for college success.

Hours: 9 lecture for each .5 unit (9-36)

Transferable: Not transferable. Not degree applicable.

### ACDV B61 Accelerated Reading

4 units

Prerequisite: BC placement into reading level 04 or successful completion of ACDV B80 or equivalent with a grade of C or better.

Recommended: ACDV B201A, ACDV B201B, and BC placement into writing level 03.

Description: This course is recommended for students who place at Reading Level 3 or 4 who need to improve academic vocabulary, reading comprehension, critical thinking, research skills, and reading flexibility with college level material. Students who successfully pass this course will have fulfilled the reading competency requirement for graduation.

Note: Not open to students with credit in ACDV B62 or ENSL B51 or EMLS B61

Hours: 72 lecture

Transferable: Not transferable. Not degree applicable.

### ACDV B70A Time Management Strategies for Academic Success

0.5 unit

Description: This course includes hands-on instruction for developing effective strategies for both personal and academic time management as it relates to academic success in college. Students work on time management activities and assignments both independently and interactively in groups on guided, hands-on activities related to developing time management skills. There are additional outside of class computer lab hours required for students to practice working on a variety of time management strategies.

Hours: 9 lecture

Transferable: Not transferable. Not degree applicable.

### ACDV B70B Note Taking Strategies for Academic Success

0.5 unit

Description: This course includes hands-on learning for developing effective strategies for note taking as it relates to academic success in college. Students work on note taking skills independently and interactively in groups on guided, hands-on activities related to developing note taking skills. There are additional outside of class computer lab hours required for students to practice working on a variety of note taking strategies.

Hours: 9 lecture

Transferable: Not transferable. Not degree applicable.

### ACDV B70C Textbook Reading Strategies for Academic Success

0.5 unit

Description: This course includes hands-on learning for developing effective textbook reading strategies to improve academic success in college. Students work on textbook reading strategies both independently and interactively in groups on guided, hands-on activities related to developing textbook reading skills. There are additional outside of class computer lab hours required for students to practice using a variety of effective

textbook reading strategies.

Hours: 9 lecture

Transferable: Not transferable. Not degree applicable.

#### **ACDV B70D Test Taking Strategies for Academic Success**

0.5 unit

Description: This course includes hands-on learning for developing effective test taking strategies related to academic success in college. Students work on test taking strategies both independently and interactively in groups on guided, hands-on activities related to developing test taking skills. There are additional outside of class computer lab hours required for students to practice working on a variety of test taking strategies.

Hours: 9 lecture

Transferable: Not transferable. Not degree applicable.

#### **ACDV B70E Memory Strategies for Academic Success**

0.5 unit

Description: This course includes hands-on learning for developing effective memory strategies related to academic success in college. Students work on memory techniques both independently and interactively in groups on guided, hands-on activities related to developing memory skills. There are additional outside of class computer lab hours required for students to practice working on a variety of memory strategies.

Hours: 9 lecture

Transferable: Not transferable. Not degree applicable.

#### **ACDV B70F Vocabulary Improvement Strategies for Academic Success**

0.5 unit

Description: This course includes hands-on learning for developing effective vocabulary improvement strategies related to academic success in college. Students work on vocabulary improvement both independently and interactively in groups on guided, hands-on activities related to developing vocabulary improvement skills. There are additional outside of class computer lab hours required for students to practice working on a variety of vocabulary improvement strategies.

Hours: 9 lecture

Transferable: Not transferable. Not degree applicable.

#### **ACDV B72 Basic Arithmetic & Pre-Algebra**

4 units

Prerequisite: BC placement into math level 01 or successful completion of ACDV B201C with a grade of PASS.

Recommended: BC placement into reading level 05.

Description: This course offers an accelerated, intensive option for preparation for Elementary Algebra. The material covered is equivalent to that covered separately in ACDV B77 (Basic Arithmetic) and Math B50 (Pre-algebra). Reviews basic arithmetic including addition, subtraction, multiplication, and division of whole numbers, integers, decimals, fractions, and also includes percent, measurement, and reading tables. Includes real life applications emphasizing estimation and word problems. To prepare for algebra, factoring, exponents, solving simple equations, introduction to plane geometry, averages, ratios, rates, and proportions are included.

Hours: 72 lecture

Transferable: Not transferable. Not degree applicable.

#### **ACDV B80 Foundations of College Composition and Reading**

4 units

Prerequisite: BC placement into reading level 03 or writing level

03 or successful completion of ACDV B201A or ACDV B201B or equivalent with a grade of PASS.

Description: This course is designed to prepare students for success in English and reading courses 2 levels prior to transfer. Students will learn basic multi-paragraph writing skills in response to thematic, mostly non-fiction reading passages. The course curriculum emphasizes critical reading skills, writing and revision processes, and basic MLA formatting and English writing conventions. Due to the integrated curriculum, students can progress in both English and reading levels in one semester.

Hours: 72 lecture

Transferable: Not transferable. Not degree applicable.

#### **ACDV B195 Basic Computer Literacy**

1-3 units

Recommended: BC placement into reading level 05.

Description: The student will learn how to identify the parts and the functions of personal computers. Students will be introduced to such varied topics as use of an internet browser, how to establish and maintain an email account, how to navigate such programs as basic word processing and function keys, how to use established databases and search engines to find information on the internet, and how to copy, save, print, and send documents from various sources.

Hours: 18-54 lecture

Transferable: Not transferable. Not degree applicable.

#### **ACDV B201A Reading for Academic Success**

0.5-1 unit

Description: This course offers individually prescribed lessons in reading fluency and comprehension, vocabulary development, study skills, critical thinking, and writing with supervised practice in the computer lab on assigned tasks. Open entry/open exit. Students should report to SS 143 as soon as possible to take orientation and complete enrollment paperwork.

Hours: 27 lab hours for each .5 unit (27-54)

Transferable: Not transferable. Not degree applicable.

#### **ACDV B201B Writing for Academic Success**

0.5-1 unit

Description: The course offers supervised, self-paced computer lab activities with Individually prescribed lessons in English language development and writing skills. Open entry/open exit lab courses. Students should report to SS 143 as soon as possible to take orientation and complete enrolment forms. ACDV B281b is recommended as a supplement to all English and Academic Development classes.

Note: ACDV B201B is recommended as a supplement to all English and Academic Development classes.

Hours: 27 lab hours for each .5 unit (27-54)

Transferable: Not transferable. Not degree applicable.

#### **ACDV B201C Basic Math Skills for Academic Skills**

0.5-1 unit

Description: This course offers supervised, self-paced computer lab activities with Individually prescribed lessons to develop basic math skills. Open entry/open exit. Students should report to SS 143 as soon as possible to take an orientation and complete enrolment forms. ACDV B281c is recommended as a supplement to all basic skills math courses.

Hours: 27 lab hours for each .5 unit (27-54)

Transferable: Not transferable. Not degree applicable.

**ACDV B280 Supervised Tutoring**

0 unit

Description: Provides tutoring in various academic subjects in a designated learning center to augment classroom instruction. Referral by subject-area instructor, counselor, or tutor trainer is suggested.

Note: Weekly hours are decided jointly by the instructor and student. Open entry/open exit.

Hours: 1-99 lab

Repeat unlimited

Transferable: Not transferable. Not degree applicable.

**ACDV B281A Supervised Tutoring-Computer: Reading**

0 unit

Description: This course offers individually prescribed lessons in reading fluency and comprehension, vocabulary development, study skills, critical thinking, and writing with supervised practice in the computer lab on assigned tasks problems. Open entry/open exit. Students should report to SS 143 as soon as possible to take orientation and complete enrollment paperwork.

Note: Weekly hours are decided jointly by the instructor and students. Students cannot register by the web for this section; see instructor in SS 143 to complete enrollment.

Hours: 1-99 lab

Repeat: Unlimited

Transferable: Not transferable. Not degree applicable.

**ACDV B281B Supervised Tutoring-Computer: Writing**

0 unit

Description: This course offers supervised, self-paced computer lab activities with prescribed lessons in English language development and writing skills. Open entry/open exit lab courses. Students should report to SS 143 as soon as possible to take orientation and complete enrollment forms. ACDV B281b is recommended as a supplement to all English and Academic Development classes.

Note: Weekly hours are decided jointly by the instructor and student. Students cannot register by the web for this course; see instructor in SS 143 to complete enrollment.

Hours: 1-99 lab

Repeat: Unlimited

Transferable: Not transferable. Not degree applicable.

**ACDV B281C Supervised Tutoring-Computer: Mathematics**

0 unit

Description: This course offers supervised, self-paced computer lab activities with prescribed lessons to develop basic math skills. Open entry/open exit lab courses. Students should report to SS 143 as soon as possible to take orientation and complete enrollment forms. ACDV B281C is recommended as a supplement to all basic skills math courses.

Note: Weekly hours are decided jointly by the instructor and student. Student cannot register by the web for this course; see instructor in SS 143 to complete enrollment.

Hours: 1 -99 lab

Repeat: Unlimited

Transferable: Not transferable. Not degree applicable.

# ADMJ - Administration of Justice Courses

**ADMJ B40 Law and Democracy**

3 units

Recommended: BC placement into reading level 06.

Description: An overview of practical aspects of civil, criminal, and constitutional law; development of skills in critical reading, writing, problem solving, and oral communication with an emphasis on preparation for success in legal education; preparation for civic engagement and community-based learning.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 4; CSU GE D.8; CSU GE D.10

**ADMJ B60 Arrest and Control Techniques. PC 832**

2.5 unit

Description: 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. Course is designed to meet the requirements of California Penal Code section 832 (PC 832), which establishes a minimum mandatory standard of training for peace officers in the State of California. Meets the Commission on Peace Officers Standards and Training (P.O.S.T.) requirements.

Hours: 45 lecture

Transferable: Not transferable. Not degree applicable.

**ADMJ B61 Firearms Training P.C. 832**

1.5 unit

Prerequisites: ADMJ B60 with a grade of 'C' or better.

Limitation on Enrollment: Per penal code section 13511.5, Students must obtain written clearance from the California Department of Justice (DOJ) verifying that they are NOT prohibited from possessing firearms. LiveSCAN and a DOJ clearance is required prior to registration for this course. LiveSCAN application is provided by WESTEC. Approval of equivalent enrollment eligibility is not a guarantee that state regulatory and licensing authorities will also grant equivalency for licensure or employment purposes. Fingerprinting is required by law to take this course and legally apply for a permit.

Description: Provides students with the competencies required for certification by Peace Officer Standards and Training (P.O.S.T.) 80101. Students will engage in the use of firearms, which will include handgun familiarization; safety; care, cleaning and storage; firearms range qualifications.

SPECIAL NOTICE: 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 which involves completion of LiveSCAN and DOJ clearance.

Hours: 27 lecture

Transferable: Not transferable. Not degree applicable.

**ADMJ B63 Power to Arrest (Security Guard Course)**

0.5 unit

Description: Provide students 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. Class meets the certification requirements for the Bureau of

Security and Investigative Services from the California State and Consumer Services Agency.

Hours: 9 lecture

Transferable: Not transferable. Not degree applicable.

### **ADMJ B72 Peace Officer's Basic Academy**

21 units

Prerequisite: Limitation on Enrollment: Per penal code section 13511.5, Students must obtain written clearance from the California Department of Justice (DOJ) verifying that they are NOT prohibited from possessing firearms. LiveSCAN and a DOJ clearance is required prior to registration for this course. LiveSCAN application is provided by WESTEC. Physical agility test, DMV printout, drug screening, medical clearance, and reading and writing assessment are also required. Approval of equivalent enrollment eligibility is not a guarantee that state regulatory and licensing authorities will also grant equivalency for licensure or employment purposes. Required by Statute.

Description: Course provides students with the competencies set forth by Peace Officer Standards and Training (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 procedure, 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: 5 lecture, 864 lab

Transferable: Not transferable. Not degree applicable.

### **ADMJ B81 Special Topics for Security Guards**

0.2 unit

Description: 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. Course meets the training requirements as set forth by the California Department of Consumer Affairs, Bureau of Security and Investigative Services.

Hours: 8 lecture

Repeat: unlimited

Transferable: Not transferable. Not degree applicable.

## **AGBS - Agriculture Business Management Courses**

### **AGBS B2 Agricultural Economics**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Course covers the role of agriculture in the economic system. Basic economic principles are applied to agriculture production, pricing and marketing. Emphasis placed on effects of state and federal farm programs on production agricultures economic position.

C-ID: AG + AB 124

Hours: 54 lecture

Transferable: CSU and private colleges; CSU GE D.2; BC GE D.2

### **AGBS B3 Introduction to Agriculture Business**

3 units

Description: Provides a basic understanding of the business and economics of the agricultural industry; an introduction to the economic aspects of agriculture and their implications to the agricultural producer, consumer and the food system; management principles encountered in the day to day operation of an agricultural enterprise as they relate to the decision making process.

C-ID: AG + AB 104

Hours: 54 lecture

Transferable: CSU and private colleges.

### **AGBS B5 Agricultural Computer Applications**

3 units

Description: Computer use in the workplace with emphasis on agribusiness situations. Computer applications including word-processing, spreadsheets, databases, and presentation managers will be covered. Also included will be accessing information through the Internet and World Wide Web, telecommunications, an introduction to web page design and other software appropriate to agribusiness. Application of these concepts and methods through hands-on projects developing computer-based solutions for agriculture business.

C-ID: AG + AB 108

Hours: 54 lecture

Transferable: Transferability pending. Degree applicable.

### **AGBS B6 Agriculture Sales and Communication**

3 units

Recommended: BC placement into reading level 06.

Description: 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.

Hours: 54 lecture

Transferable: CSU and private colleges.

### **AGBS B48WE Occupational Work Experience Education**

1-8 units

Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.

Description: College credit for agricultural business related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.

Hours: Non-paid 60 hours for each 1 unit (60 - 480). Paid 75 hours for each 1 unit (75 - 600).

Transferable: CSU and private colleges.

## AGRI - Agriculture Courses

### AGRI B1 Agriculture, Environment, and Society

3 units

Recommended: BC placement into reading level 06.

Description: 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.

Hours: 54 lecture

Transferable: CSU and private colleges; CSU GE D.7; BC GE D.2

### AGRI B49 Agriculture Leadership Training

2 units

Description: Agriculture leadership training through the application of individual and group leadership techniques.

Requires participation as: an Agriculture Ambassador team member in the promotion and understanding of California agriculture, participation in college recruitment activities (including giving recruitment presentations at off campus sites), hosting prospective student groups for on-campus visitations, and sponsoring recruitment activities for the local Agriculture industry. Field trips required.

Note: Elective credit only.

Hours: 18 lecture, 54 lab

Transferable: CSU and private colleges.

## ANSC - Animal Science Courses

### ANSC B1 Introduction to Animal Science

3 units

Recommended: BC placement into reading level 06.

Description: 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. Field trips may be required.

C-ID: AG + AS 104

Hours: 36 lecture, 54 lab

Transferable: UC, CSU and private colleges; BC GE B.1

### ANSC B2 Beef Production

3 units

Recommended: Successful completion of ANSC B1 with a grade of C or better and BC placement into reading level 06.

Description: 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.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

### ANSC B3 Sheep Production

3 units

Description: 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.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

### ANSC B4 Dairy Production

3 units

Description: 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.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

### ANSC B5 Swine Production

3 units

Description: 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.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

### ANSC B6 Applied Animal Nutrition

4 units

Description: 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.

Hours: 54 lecture, 54 lab

Transferable: CSU and private colleges.

### ANSC B7 Animal Diseases

3 units

Description: Covers major and 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.

Hours: 54 lecture

Transferable: CSU and private colleges.

### ANSC B10 Horse Production

3 units

Recommended: Successful completion of ANSC B1 with a grade of C or better and BC placement into reading level 06.

Description: Survey of the equine industry, encompassing the evolution and role of the equine species throughout history, breed selection and development, nutrition, disease, preventative health, reproductive management, basic horsemanship, and stabling alternatives. Lab required. Field Trips

may be required.

C-ID: AG-AS 116L

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

### **ANSC B11 Livestock Selection and Evaluation**

3 units

Description: Detailed analysis of visual, analytical, and physical methods of appraising beef, sheep, swine and horses concerning functional and economic value; written and oral summaries of evaluation; specific reference made to performance data and factors determining carcass value. Lab required.

Hours: 36 lecture, 54 lab

Transferable: UC, CSU and private colleges

### **ANSC B22 Animals and Society**

3 units

Recommended: BC placement into reading level 06.

Description: 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.

Hours: 54 lecture

Transferable: UC, CSU and private colleges

### **ANSC B48WE Occupational Work Experience Education**

1-8 units

Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.

Description: College credit for animal science related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.

Hours: Non-paid 60 hours for each 1 unit (60 - 480). Paid 75 hours for each 1 unit (75 - 600).

Transferable: CSU and private colleges.

### **ANSC B83 Introduction to Veterinary Technology**

4 units

Description: Introductory course designed to orientate and instruct students in knowledge required for success in advanced veterinary technology courses. Topics include: anatomy and physiology of domestic animals (Integumentary, cardiovascular, respiratory, reproductive, gastrointestinal, and neurological systems), nutrition, pharmacology, basics of chemistry, biology, microbiology, (including cellular anatomy/physiology), genetics and heredity, and career opportunities. Medical terminology, regulations, office management and record keeping skills are also covered, as they pertain to working in a veterinary practice. Field trips may be required. Occupational Education.

Note: formerly ANSC B80 and ANSC B82.

Hours: 72 lecture

Transferable: Not transferable. Degree applicable.

### **ANSC B84 Small Animal Diseases**

1.5 units

Prerequisites: ANSC B83 with a grade of 'C' or better.

Description: Presents knowledge of diseases in small domestic animals, including prevention and treatment programs. Includes instruction in physical diagnosis and discussion of tests and

procedures needed for proper diagnosis that the technician uses to assist veterinarian. Also covers animal husbandry procedures relating to disease prevention. Disease entities to be taught include: mechanical, genetic, infectious, nutritional, endocrine, and metabolic conditions.

Hours: 27 lecture

Transferable: Not transferable. Degree Applicable

### **ANSC B85 Large Animal Diseases**

1.5 units

Prerequisite: Successful completion of either ANSC B83 or both ANSC B80 and ANSC B82 with grades of C or better.

Description: 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 nursing and husbandry procedures relating to disease prevention will also be included. Disease entities taught include infectious, nutritional, endocrine, mechanical and metabolic conditions.

Hours: 27 lecture

Transferable: Not transferable. Degree applicable.

### **ANSC B86 Pharmacology for Veterinary Technicians**

1.5 units

Prerequisite: Successful completion of either ANSC B83 or both ANSC B80 and ANSC B82 with a grade of C or better.

Description: 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.

Hours: 27 lecture

Transferable: Not transferable. Degree applicable.

### **ANSC B88 Surgery, Dental, and Anesthesiology for Veterinary Technicians**

1.5 units

Prerequisite: Successful completion of either ANSC B83 or both ANSC B80 and ANSC B82 with grade of C or better.

Description: Instruction in the identification and care of instruments, the importance of asepsis and sterilization techniques, surgical pack preparation, anesthetic instrumentation, induction and monitoring, surgical nursing, assisting and instrumentation, and suturing techniques used in veterinary medicine.

Hours: 27 lecture

Transferable: Not transferable. Degree applicable.

### **ANSC B90 Emergency Medicine, Surgery/Nursing Procedures for Veterinary Technicians**

2 units

Prerequisite: Successful completion of either ANSC B83 or both ANSC B80 and ANSC B82 with grade of C or better.

Description: Provides the student with knowledge required to recognized and provide emergency and critical care to veterinary patient, including establishing a patent airway, administering oxygen, controlling hemorrhage, performing CPR, and stabilizing patient to prevent and/or treat shock.

Hours: 36 lecture

Transferable: Not transferable. Degree applicable.

**ANSC B92 Clinical Pathology for Veterinary Technicians**

2 units

Prerequisite: Successful completion of either ANSC B83 or both ANSC B80 and ANSC B82 with grade of C or better.

Description: Course covers biology, microbiology, parasitological cytology, urinalysis, hematology, serology, and pathology necessary for a career as a Registered Veterinary Technician. The student will be instructed in normal and abnormal test values.

Course covers the understanding, reading and application of specific test results, as well as specimen handling and necropsy techniques.

Hours: 36 lecture

Transferable: Not transferable. Degree applicable.

**ANSC B94 Caged Birds, Lab, and Exotic Animal Medicine**

2 units

Prerequisite: Successful completion of either ANSC B83 or both ANSC B80 and ANSC B82 with grade of C or better.

Description: Covers anatomy, physiology, disease descriptions, and identification of caged birds, lab, and exotic animals.

Instruction in restraint, physical examination, anesthesia, surgery, specimen collection, species identification, and the legal ramifications of owning exotic animals.

Hours: 36 lecture

Transferable: Not transferable. Degree applicable.

**ANSC B96 Radiology, Ultrasound, and Diagnostic Imaging for Veterinary Technology**

1.5 units

Prerequisite: Successful completion of either ANSC B83 or both ANSC B80 and ANSC B82 with grade of C or better.

Description: 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. Instruction includes knowledge for preparing patient for imaging (radiograph and ultrasonography), positioning patient for imaging, safety during imaging, processing images/radiographic film, and maintenance of imaging equipment.

Hours: 27 lecture

Transferable: Not transferable. Degree applicable.

**ANTH - Anthropology Courses****ANTH B1 Physical Anthropology**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

C-ID: ANTH 110

Transferable: UC, CSU and private colleges; IGETC 5.B; CSU GE B.2; BC GE B.1

**ANTH B2 Introduction to Cultural Anthropology**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 4; CSU GE D.1; BC GE D.2

**ANTH B3 Introduction to Archaeology**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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. Field trips may be required.

Hours: 54 lecture

C-ID: ANTH 150

Transferable: UC, CSU and private colleges; IGETC 4; CSU GE D.1; BC GE D.2

**ANTH B5 North American Indians**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 4; CSU GE D.1; CSU GE D.3; BC GE D.2

**ARCH - Architecture Courses****ARCH B1 Intro to Architecture and Environmental Design**

1.5 units

Description: 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.

Note: Satisfies 0.5 unit counseling requirement for graduation from Bakersfield College.

Hours: 27 lecture

Transferable: CSU and private colleges.

**ARCH B6 Materials of Construction**

3 units

Description: Use of application of construction processes and materials. Field trips required.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

**ARCH B11 Design and Perspective Drawing**

4 units

Description: 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 lecture, 108 lab

Transferable: UC, CSU and private colleges

**ARCH B12 Design, Drawing and Color**

4 units

Prerequisite: Successful completion of ARCH B11 or equivalent with a grade of C or better.

Description: 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 link between graphics, design process and communications. Field trips may be required.

Hours: 36 lecture, 108 lab

Transferable: UC, CSU and private colleges

**ARCH B16 Digital Tools for Graphics Communication**

3 units

Description: An introduction to the use of digital tools in architectural design and visual communication in the areas of 3D modeling, image editing, 2D graphics and page layout.

Hours: 27 lecture, 81 lab

Transferable: CSU and private colleges.

**ARCH B21 Architectural Design Fundamentals I**

4 units

Prerequisite: Successful completion of ARCH B1 and B11 and B12 or equivalent with a grade of C or better.

Description: Theories, principles, methods and means pertaining to the creation of two- and three-dimensional visual organizations to communicate intended concepts and meanings. Field trips required.

Materials Fee: \$15.00

Hours: 36 lecture, 108 lab

Transferable: UC, CSU and private colleges

**ARCH B22 Architectural Design Fundamentals II**

4 units

Prerequisite: Successful completion of ARCH B21 or equivalent with a grade of C or better.

Description: Continuation of the content and issues introduced in ARCH B21 plus the theories, principles, methods and means pertaining to the creation of architectural forms, space and organizations and incorporation of function and light as issues that shape the built environment and support the communication of intended concepts and meanings. Field trips required.

Materials Fee: \$15.00

Hours: 36 lecture, 108 lab

Transferable: UC, CSU and private colleges

**ARCH B30 Residential Building Information Modeling**

4 units

Prerequisite: Successful completion of ARCH B6 with a grade of C or better.

Description: Introduction to the application of computers in architecture with the use of Building Information Modeling (BIM), including operating systems, applications and graphic systems as they relate to construction documents and design technology. Residential wood construction methods and processes including construction documents. Not open to students who have successfully completed ARCH B31 and/or ARCH B32.

Materials Fee: \$15.00

Hours: 36 lecture, 108 lab

Transferable: CSU and private colleges.

**ARCH B33 Architectural Computer Practice**

3 units

Prerequisite: Successful completion of ARCH B30 with a grade of C or better.

Description: This course uses 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 are studied. Field trips required.

Materials Fee: \$15.00

Hours: 27 lecture, 81 lab

Transferable: CSU and private colleges.

**ARCH B48WE Occupational Work Experience Education**

1-8 units

Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.

Description: College credit for architecture related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.

Hours: Non-paid 60 hours for each 1 unit (60-480). Paid 75 hours for each 1 unit (75-600).

Transferable: CSU and private colleges

**ARCH B55 Residential Building Codes**

3 units

Recommended: BC placement into reading level 06.

Description: Study of the uniform building codes, local codes and related ordinances. Fundamental structural concepts involved in code work, code interpretation and enforcement. Field trips required.

Hours: 54 lecture

Transferable: Not transferable. Degree applicable.

**ARCH B56 Commercial Codes**

3 units

Recommended: BC placement into reading level 06.

Description: Study of the uniform building, plumbing, mechanical and electrical codes as they relate to Commercial Construction. A companion course to ARCH B55 offering a greater in-depth study of the various codes which make up the Code of Building Regulations. Field trips may be required.

Hours: 54 lecture

Transferable: Not transferable. Not degree applicable.



# ART - Art Courses

## ART B1 Art Appreciation

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

C-ID: ARTH 100

Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

## ART B2 Drawing I

3 units

Recommended: BC placement into reading level 06.

Description: Course introduces the fundamentals of representational 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.

Hours: 27 lecture, 81 lab

C-ID: ARTS 110

Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

## ART B3 Drawing II

3 units

Prerequisite: Successful completion of ART B2 or equivalent with a grade of C or better.

Description: 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.

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges

## ART B4 Two-Dimensional Design

3 units

Recommended: BC placement into reading level 06.

Description: 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.

Note: Not open to students who have successfully completed ART B3A, ART B3B, or ART B3AB.

C-ID: ARTS 100

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

## ART B5 Three Dimensional Design

3 units

Recommended: BC placement into reading level 06.

Description: 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.

Hours: 27 lecture, 81 lab

C-ID: ARTS 101

Transferable: UC, CSU and private colleges; BC GE C.1

## ART B6 Acrylic Painting I

3 units

Prerequisites: Successful completion of ART B2 or equivalent with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: Introduction to principles, elements, and practices of painting. Focus on exploration of painting materials, perceptual skills and color theory, paint mixing and technique, as well as creative responses to materials and subject matter.

Note: Not open to students who have successfully completed ART B4A, B4B or ART B4AB.

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges

## ART B7 Acrylic Painting II

3 units

Prerequisites: Successful completion of ART B6 or equivalent with a grade of C or better.

Description: A continuation of ART B6. Students review and refine techniques using acrylic paint as an expressive medium.

Emphasis is placed upon personal explorations.

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges

## ART B8 Figure Drawing I

3 units

Prerequisites: Successful completion of ART B2 or equivalent with a grade of C or better.

Description: 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, conte, pastels, and watercolor. Not open to students who have successfully completed ART B2E, ART B2F, or ART B2EF.

C-ID: ARTS 200

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges

## ART B9 Figure Drawing II

3 units

Prerequisites: Successful completion of ART B8 or equivalent with a grade of C or better.

Description: 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, conte, pastels, and watercolor.

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges

## ART B10 Ceramics I

3 units

Recommended: BC placement into reading level 06.

Description: 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.

Materials Fee: \$15.00 for finished ceramic artwork, glazes, and some clay.

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges; BC GE C.1

**ART B11 Ceramics II**

3 units

Prerequisites: ART B10 or equivalent with a grade of 'C' or better.

Description: 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.

Materials Fee: \$15.00 covers cost of glazes and some clay, and students will receive finished ceramic artwork.

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges

**ART B12 Ceramics III**

3 units

Prerequisite: Successful completion of ART B11 or equivalent with a grade of C or better.

Description: 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.

Materials Fee: \$15.00 covers cost of glazes and some clay, and students will receive finished ceramic artwork.

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges

**ART B13 Sculpture I**

3 units

Prerequisite: Successful completion of ART B5 with a grade of C or better.

Description: 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.

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges; CSU GE C.1

**ART B14 Sculpture II**

3 units

Prerequisite: Successful completion of ART B13 with a grade of C or better.

Description: Advanced study in sculptural concepts and three-dimensional forms. Explores the expressive meaning of form and the expressive potential of materials.

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges

**ART B16 Digital Photography**

3 units

Recommended: BC placement into reading level 06.

Description: 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.

Materials Fee: \$15.00 covers cost of ink and paper for printing student projects. Students receive a portfolio of prints.

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges; BC GE C.1

**ART B17 Black and White Photography**

3 units

Recommended: BC placement into reading level 06.

Description: 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.

Materials Fee: \$25.00

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges; BC GE C.1

**ART B20 Digital Art - Vector**

3 units

Recommended: BC placement into reading level 06.

Description: 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.

Materials Fee: \$15.00 for toner and paper. Students will receive a portfolio of printed work.

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges; BC GE C.1

**ART B24 Digital Art - Raster**

3 units

Recommended: BC placement into reading level 06.

Description: 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.

Materials Fee: \$15.00 for toner and paper. Students will receive a portfolio of printed work.

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges; BC GE C.1

**ART B25 Typography**

3 units

Prerequisites: Successful completion of ART B20 and ART B24 or equivalent with a grade of C or better.

Description: This course focuses on effective typographic usage in visual media. Students explore the evolution of type from ancient to contemporary, and create original typographic design solutions. Projects feature investigation of structure, format, legibility, and expression.

Material Fee: \$15.00 for toner and paper. Students receive a portfolio of printed work.

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges

**ART B26 Multimedia**

3 units

Prerequisites: Successful completion of ART B20 and either ART B16 or ART B24 with grade of C or better.

Description: This course introduces students to multiple digital mediums used for creating multimedia productions. This project based course teaches students to work with production gear such as tripods, cameras, and storage media. Students will learn best practices for digital workflows and the management of a variety of digital assets.

Hours: 27 lecture, 81 lab

Transferable: CSU and private colleges.

### **ART B29 Special Studies in Art**

1-3 units

Prerequisites: Limitation on Enrollment - student must have successfully completed a sequence of courses within an art discipline or exhibit skills equivalent to student learning outcomes for a specific discipline in art as determined by the portfolio review by the professor.

Description: Independent study course intended for students pursuing deep exploration into a specific body of work. Content and unit credit are determined by instructor and student in consultation. Enrollment by permission of instructor only.

Hours: 54 lab hours for each unit (54-162)

Transferable: CSU and private colleges.

### **ART B35 Survey of Western Art I**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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).

Hours: 54 lecture

C-ID: ARTH 110

Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

### **ART B36 Survey of Western Art II**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: This lecture course is a historical survey of Western architecture and visual arts from 1400 CE to the present day.

C-ID: ARTH 120

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

### **ART B37 Survey of Art - Latin America**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

### **ART B40 Digital Illustration**

3 units

Prerequisites: Successful completion of ART B25 with a grade of C or better.

Description: 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.

Materials Fee: \$15.00 for toner and paper. Students receive a portfolio of printed work.

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges

### **ART B41 Advertising Design**

3 units

Prerequisites: Successful completion of ART B25 with a grade of C or better.

Description: 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.

Materials Fee: \$15.00 for toner and paper. Students will receive a portfolio of printed work.

Hours: 27 lecture, 81 lab

Transferable: CSU and private colleges.

### **ART B42 Graphic Design**

3 units

Prerequisites: Successful completion of ART B40 and ART B41 or equivalent with a grade of C or better.

Description: This course focuses on the design of visual communication. Through concept development, type, and images, students create original design solutions. Corporate identity and branding development is introduced.

Materials Fee: \$15.00

Hours: 27 lecture, 81 lab

Transferable: CSU and private colleges.

### **ART B43 Video Production**

3 units

Prerequisites: Successful completion of ART B26 with a grade of C or better.

Description: This course will introduce students to the fundamental elements and concepts of non-linear video editing. Through this project based learning course students will learn the foundations of editing. Material covered will include shooting digital video, asset acquisition, editing, rendering, and uploading media to online platforms such as YouTube and Vimeo.

Hours: 27 lecture, 81 lab

Transferable: CSU and private colleges.

### **ART B44 Motion Graphics**

3 units

Prerequisites: Successful completion of ART B26 with a grade of C or better.

Description: This course will cover all of the foundational elements of motion graphics. Through a series of short form productions, students will learn how to set up projects, how to prepare assets for motion, how to key frame those assets, and how to render a final composition. Students will learn about the connection between motion and music with a culminating short film exploring this connection.

Hours: 27 lecture, 81 lab

Transferable: CSU and private colleges.

### **ART B45 Animation**

3 units

Prerequisites: Successful completion of ART B43 and ART B44 with a grade of C or better.

Description: In this project-based course, students will take a hands on approach to learning the art of animation. Through pre-production, production, and post production, students will create an series of animated films.

Hours: 27 lecture, 81 lab  
Transferable: CSU and private colleges.

### **ART B46 Advanced Photography I**

3 units

Prerequisites: Successful completion of ART B16 or ART B17 or equivalent with a grade of C or better.

Description: Course focus is on review and refinement of photography skills, with an emphasis on personal expression. A suitable SLR camera is required.

Materials Fee: \$15.00

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges

### **ART B47 Advanced Photography II**

3 units

Prerequisites: Successful completion of ART B46 or equivalent with a grade of C or better.

Description: 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.

Materials Fee: \$15.00

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges

### **ART B48 Advanced Photography III - Independent Study**

1-3 units

Prerequisites: Successful completion of ART B47 or equivalent with a grade of C or better.

Description: 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. Must be taken for three units to count for the photography certificate. Enrollment by permission of instructor only.

Materials Fee: \$15.00

Hours: 54 lab hours for each unit (54-162)

Transferable: CSU and private colleges.

## **ASL - American Sign Language Courses**

### **ASL B1 American Sign Language 1**

4 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Study of the fundamentals of American Sign Language. Introduces basic vocabulary and grammatical structure of ASL, conversational strategies, numbers, fingerspelling, and non-verbal aspects of American Sign Language. Provides an overview of Deaf history and Deaf cultural values. Outside assignments require practice and assessment with video programs. Field trips required.

Hours: 72 lecture

Transferable: UC, CSU and private colleges; IGETC 6.A; CSU GE C.2; BC GE C.2

### **ASL B2 American Sign Language 2**

4 units

Prerequisites: Successful completion of ASL B1 or equivalent with a grade of C or better.

Recommended: BC placement into reading level 06 and writing level 06.

Description: Continued study of the fundamentals of American Sign Language. Emphasizes conversational strategies such as keeping others informed, minimizing interruptions, and turn-taking, as well as grammatical forms such as verb agreement, negation, and role-shifting. Further instruction in specialized fingerspelling and numerical proficiency. Exploration of Deaf culture, emphasizing cultural norms and notable Deaf persons. Outside assignments require practice and assessment with video programs. Field trips required.

Hours: 72 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 6.A; CSU GE C.2; BC GE C.2

### **ASL B3 American Sign Language 3**

4 units

Prerequisites: Successful completion of ASL B2 or equivalent with a grade of C or better.

Recommended: BC placement reading level 06 and writing level 06.

Description: Study of advanced aspects of American Sign Language. Emphasizes advanced narrative fluency. Focus on temporal aspects, when clauses, classifiers, and mouth morphemes. Develops advanced narrative skills such as inflecting verbs, durative aspect, and transitions. Discussion of various aspects of American Deaf culture with a focus on literary tradition. Outside assignments require practice and assessment with video programs. Field trips required.

Hours: 72 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 6.A; CSU GE C.2; BC GE C.2

### **ASL B4 American Sign Language 4**

4 units

Prerequisites: Successful completion of ASL B3 or equivalent with a grade of C or better.

Recommended: BC placement reading level 06 and writing level 06.

Description: Continued study of advanced aspects of American Sign Language. Emphasizes receptive and expressive narrative fluency and Deaf rhetorical approaches. Focuses on specific linguistic aspects of ASL such as classifier combinations, role-shifting, conditionals, and expansion. Advanced practice with receptive and expressive fingerspelling. Also includes exploration of issues pertinent to Deaf culture. Outside assignments require practice and assessment with video programs. Field trips required.

Hours: 72 lecture

Transferable: UC, CSU and private colleges; IGETC 6.A; BC GE C.2

### **ASL B6 American Deaf Culture**

3 units

Prerequisites: Successful completion of ASL B3 or equivalent with a grade of C or better.

Recommended: BC placement reading level 06 and writing level 06.

Description: 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. Field trips required.

Hours: 54 lecture

Transferable: UC, CSU and private colleges

### **ASL B7 American Sign Language Literature**

3 units

Prerequisites: Successful completion of ASL B3 or equivalent with a grade of C or better.

Recommended: BC placement reading level 06 and writing level 06.

Description: Exploration interpretation, and analysis of storytelling, folklore, poetry, and plays of the American Deaf community. Study and performance of ASL poetry, hand-shape and ABC stories. Study of Deaf folklore and other forms of "oral" storytelling traditions. Criticism and analysis of Deaf plays in written English.

Hours: 54 lecture

Transferable: UC, CSU and private colleges, BC GE C.2

### **ASL B62 Fingerspelling, Numbers & Classifiers**

3 units

Prerequisites: Successful completion of ASL B2 or equivalent with a grade of C or better.

Description: This course will focus on fingerspelling, numbers and Classifiers. We will be working towards comprehension and knowledge of the process of fingerspelling and ability to produce fingerspelling appropriately. Students will also work on expanding their use of ASL by incorporating Classifiers in their interpreting.

Hours: 54 lecture

Transferable: Not transferable. Not degree applicable.

### **ASL B63 Ethics and Decision Making**

3 units

Prerequisites: Successful completion of ASL B4 with a grade of C or better.

Description: This course will introduce the professional code of conduct used by various professional interpreting organizations. Student will explore individual ethics and subjective belief systems along with techniques used to remain unbiased in professional situations/settings. Students will apply their training to real life scenarios such as medical, educational, mental health, and other settings.

Hours: 54 lecture

Transferable: Not transferable. Not degree applicable.

### **ASL B64 Introduction to Translation**

3 units

Prerequisites: Successful completion of ASL B4 with a grade of C or better.

Description: Focus primarily on building extensive specialized vocabularies essential for gaining sign language fluency and conversational competence for professionals working with Deaf and Hard of hearing individuals.

Hours: 54 lecture

Transferable: Not transferable. Not degree applicable.

### **ASL B66 Introduction to the Interpreting Profession**

3 units

Prerequisites: Successful completion of ASL B4 with a grade of C or better.

Description: This course will introduce students to the profession

of sign language interpreting. Topic will include, history of sign language interpreting, history of professional organizations, evolution of interpreting models, professional practices, hearing versus deaf culture, job market prospects, and the process of interpreting.

Hours: 54 lecture

Transferable: Not transferable. Not degree applicable.

### **ASL B68 Interpreting I**

4 units

Prerequisites: Successful completion of ASL B64 with a grade of C or better.

Description: This course will provide students with the cognitive and practical skills necessary for interpreting between American Sign Language and English. This will include discourse analysis of the source and target language. Students will develop the steps necessary to effectively produce an equivalent target language message through translation, consecutive interpreting, and peer collaboration. This course will help students develop a stronger foundation in features of ASL.

Hours: 72 lecture

Transferable: Not transferable. Not degree applicable.

### **ASL B72 Structure of American Sign Language**

3 units

Prerequisites: Successful completion of ASL B4 with a grade of C or better.

Description: Structure of ASL explores various linguistic aspects of American Sign Language, including basic concepts, phonology, morphology, syntax, semantics, and pragmatics.

Hours: 54 lecture

Transferable: Not transferable. Not degree applicable.

## **ASTR - Astronomy Courses**

### **ASTR B1 Physics of the Cosmos**

3 units

Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.

Recommended: BC placement into writing level 06 and math level 02.

Description: 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.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 5.A; CSU GE B.1; BC GE B.1

### **ASTR B2 Life in the Universe**

3 units

Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.

Recommended: BC placement into writing level 06 and math level 02.

Description: 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.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 5.A; CSU GE B.1; BC GE B.1

### **ASTR B3 Solar System**

3 units

Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: Introductory course on the Sun, Earth, other planets, moons, rings, comets, asteroids, and extra-solar planets, formation and development of the Earth and solar system, and possibility of life on other worlds.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 5.A; CSU GE B.1; BC GE B.1

## **AUTO - Automotive Technology Courses**

### **AUTO B1AB Introduction to Automotive Technology**

4 units

Recommended: Reading - one level prior to transfer.

Description: 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 emissions controls), b) electrical systems (battery, starting, charging, lighting, and ignition), c) the chassis (suspension, wheel alignment, steering, brakes, tires, and wheels), and d) the drive line (clutch, standard, and automatic transmissions, universal joints and differential).

Not open to students with credit in AUTO B1, B1A, or B1B.

Hours: 54 lecture, 54 laboratory

Transferable: CSU and private colleges, elective credit only

### **AUTO B3 Fundamentals of Automotive Management and Services**

4 units

Prerequisites: Successful completion of AUTO B11 or equivalent with a grade of C or better.

Description: 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/businesses and shops.

The positions are: 1) Service Writer/Adviser, 2) Parts-Sales and Service (Parts Counter Person), 3) Warranty Specialist and 4) DMV Specialist.

Hours: 54 lecture, 54 lab

Transferable: CSU and private colleges.

### **AUTO B10 Automotive Safety**

0.5 unit

Description: This course offers the students the knowledge and awareness they need to stay safe as they work in the automotive industry. Upon successful completion of this course student will receive certificate of completion certifying that they have been safety trained in compliance with federal mandates. This course is required for all automotive students.

Hours: 9 lecture

Transferable: Not transferable. Not degree applicable.

### **AUTO B11 Introduction to Automotive Technology**

4 units

Prerequisites: Successful completion of AUTO B10 with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: This is an introductory automotive course that provides students with theory, knowledge, and skills necessary to understand the basic engine, drive-train, and other support systems. The lab component of the class will focus on general inspection procedures, maintenance and light repair work that is common in automotive, agricultural and industrial applications. Demonstrated lecture, simulated problem diagnosis and practical application on "live" vehicles will be used. Prepares students for Automotive Maintenance and Light Repair (G1) ASE exam. This course is a prerequisite to most of the automotive courses. Not open to students who have previously received credit for AUTO B1AB.

Hours: 54 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

### **AUTO B20 Engine Theory, Design and Diagnosis**

4 units

Prerequisites: Successful completion of AUTO B11 with a grade of C or better.

Description: This course offers the student the advanced skills required for accurate diagnosis and repair of internal combustion engines. The theory and construction of gasoline and diesel engines found in automotive, agricultural and industrial applications will be covered. Demonstrated lecture, simulated problem diagnosis and practical application on "live" vehicles will be used. Students are encouraged, but not required, to supply their own project. Preparation for the ASE A1 and A8 exams will be covered. Not open to students who have previously received credit for AUTO B2A.

Hours: 54 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

### **AUTO B21 Upper Engine Systems and Machining**

4 units

Prerequisites: Successful completion of AUTO B20 with a grade of C or better.

Description: This course offers the student the advanced skills required for accurate repair and machining of the cylinder head and valvetrain systems in gasoline and diesel engines found in automotive, agricultural and industrial applications. Demonstrated lecture, simulated problem diagnosis and practical application on "live" vehicles will be used. Students are encouraged, but not required, to supply their own project. Preparation for the ASE A1 and A8 exams will be covered. Not open to students who have previously received credit for AUTO

B2A.

Hours: 54 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

### **AUTO B22 Lower Engine Systems and Machining**

5 units

Prerequisites: Successful completion of AUTO B21 with a grade of C or better.

Description: This course offers the student the advanced skills required for accurate repair and machining of the cylinder block, crankshaft and connecting rods in gasoline and diesel engines found in automotive, agricultural and industrial applications. Demonstrated lecture, simulated problem diagnosis and practical application on "live" vehicles will be used. Students are encouraged, but not required, to supply their own project. Preparation for the ASE A1 and A8 exams will be covered. Not open to students who have previously received credit for AUTO B2B.

Hours: 72 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

### **AUTO B23 Engine Assembly and Performance**

5 units

Prerequisites: Successful completion of AUTO B22 with a grade of C or better.

Description: This class offers the student the application of engine overhaul theory and repair procedures, including reassembly, initial startup and tuning of gasoline and diesel engines found in automotive, agricultural and industrial applications. Advanced engine theory, design, practical and theoretical high performance modifications are all part of this course. Demonstrated lecture, simulated problem diagnosis and practical application on "live" vehicles will be used. Students are encouraged, but not required, to supply their own project. Preparation for the ASE A1 and A8 exams will be covered. Not open to students who have previously received credit for AUTO B2B.

Hours: 72 lecture, 54 lab

Transferable: Not transferable. Not degree applicable.

### **AUTO B30 Electrical and Electronic Systems**

4 units

Prerequisites: Successful completion of AUTO B11 with a grade of C or better.

Description: This is an introductory electrical course that provides students with theory, knowledge, and skills necessary to understand electrical flow and electronic concepts. Instruction is given and lab experience provided which will enable students to successfully perform diagnostics and repair on basic electrical and electronic circuits found in automotive, agricultural and industrial applications. Demonstrated lecture, simulated problem diagnosis and practical application on "live" vehicles will be used. Preparation for the ASE A6 and California State Lamp Adjuster examination will be covered. Not open to students who have previously received credit for AUTO B14.

Hours: 54 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

### **AUTO B31 Advanced Electrical and Electronic Systems**

5 units

Prerequisites: Successful completion of AUTO B30 with a grade of C or better.

Description: This is an advanced course that provides students with theory, knowledge, and skills necessary to understand

advanced automotive electronic diagnostic and repair concepts. Instruction is given and lab experience provided which will enable students to successfully perform diagnostics, pinpoint tests, and employ advanced circuit test strategies on electrical and electronic circuits. Demonstrated lecture, simulated problem diagnosis and practical application on "live" vehicles will be used. The course prepares students for the A-6 and L3 ASE exams. Not open to students who have previously received credit for AUTO B14.

Hours: 72 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

### **AUTO B33 Engine Performance**

4 units

Prerequisites: Successful completion of AUTO B20 with a grade of C or better.

Description: This course offers the student the skills required for accurate diagnosis and repair of fuel, emission, and engine management systems related to engine performance. The theory and construction of engine performance systems found in automotive, agricultural and industrial applications will be covered. Demonstrated lecture, simulated problem diagnosis and practical application on "live" vehicles will be used. The course prepares students for the A-8 engine performance ASE exam. Not open to students who have previously received credit for AUTO B15.

Hours: 54 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

### **AUTO B34 Advanced Engine Performance**

5 units

Prerequisites: Successful completion of AUTO B33 with a grade of C or better.

Description: This course offers the student the advanced skills required for accurate diagnosis and repair of fuel, emission, and engine management systems related to engine performance. The theory and construction of advanced engine performance systems found in automotive, agricultural and industrial applications will be covered. Demonstrated lecture, simulated problem diagnosis and practical application on "live" vehicles will be used. The course prepares students for the A-8 and L1 ASE exams. Not open to students who have previously received credit for AUTO B15.

Hours: 72 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

### **AUTO B36 Light Duty Diesel Performance**

4 units

Prerequisites: Successful completion of AUTO B33 with a grade of C or better.

Description: This course offers the student the advanced skills required for accurate diagnosis and repair of diesel engines. The theory and construction of diesel engine systems found in automotive, agricultural and industrial applications will be covered. Students will also study various manufacturers' engine platforms and examine how diesel power and performance is achieved. Demonstrated lecture, simulated problem diagnosis and practical application on "live" vehicles will be used. The course prepares students for the A9 and L2 ASE exams.

Hours: 54 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

**AUTO B39 Level 1 and Level 2 Smog Inspector Training**

4 units

Prerequisites: Successful completion of AUTO B10 with a grade of C or better.

Description: This is a Bureau of Automotive Repair certified course which includes Level 1 and Level 2 certificate training. The Level 1 (L1) Engine and Emission Control training is intended to provide students with fundamental knowledge of engine and emission control theory, design, and operation. The Level 2 (L2) Smog Check Training is intended to provide students with the knowledge, skills, and abilities needed to perform Smog Check inspections. Students who successfully pass both Level 1 and Level 2 training courses will have met the eligibility requirements to take the Smog Check Inspector State License examination.

Hours: 54 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

**AUTO B40 Suspension, Steering and Wheel Alignment**

4 units

Prerequisites: AUTO B11 or AUTO B30 with a grade of 'C' or better.

Description: This course provides the students with theory, knowledge, and skills necessary to accurately diagnose and repair suspension and steering systems. Instruction is given and lab experience provided for removal, disassembly, inspection, re-assembly, installation and wheel alignment of suspension and steering systems found in automotive, agricultural and industrial applications. Demonstrated lecture, simulated problem diagnosis and practical application on "live" vehicles will be used. The course prepares students for ASE A-4 Suspension and Steering Systems Certification exam. Not open to students who have previously received credit for AUTO B106.

Hours: 54 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

**AUTO B43 Brake Systems**

4 units

Prerequisites: Successful completion of AUTO B11 or AUTO B30 with a grade of C or better.

Description: This course provides the students with theory, knowledge, and skills necessary to accurately diagnose and repair brake systems on passenger cars, light trucks, and heavy duty applications. Instruction is given and lab experience provided for removal, disassembly, inspection, re-assembly, precision measurement, machining, and installation of braking systems found in automotive, agricultural and industrial applications. Demonstrated lecture, simulated problem diagnosis and practical application on "live" vehicles may be used. The course prepares students for the A-5 Brake ASE and California state Brake Adjuster Certification examination. Not open to students who have previously received credit for AUTO B106.

Hours: 54 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

**AUTO B46 Automatic Transmissions**

5 units

Prerequisites: Successful completion of AUTO B11 or AUTO B30 with a grade of C or better.

Description: This is an advanced level course that provides the students with theory, knowledge, and skills necessary to accurately diagnose and repair automatic transmissions and transaxles. Instruction is given and lab experience provided for removal, disassembly, inspection, re-assembly and installation of transmissions and transaxles found in automotive, agricultural and industrial applications. Demonstrated lecture,

simulated problem diagnosis and practical application on "live" vehicles will be used. Prepares students for ASE A-2 Automatic Transmission and Transaxle Certification examination. Not open to students who have previously received credit for AUTO B112.

Hours: 72 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

**AUTO B48 Manual Transmissions and Drivetrain**

4 units

Prerequisites: AUTO B11 or AUTO B46 with a grade of 'C' or better.

Description: This is an advanced level course that provides the students with theory, knowledge, and skills necessary to accurately diagnose and repair manual transmissions and drivetrains. Instruction is given and lab experience provided for removal, disassembly, inspection, re-assembly and installation of manual transmissions and drivetrains found in automotive, agricultural and industrial applications. Demonstrated lecture, simulated problem diagnosis and practical application on "live" vehicles will be used. Prepares students for ASE A-3 Manual Drive Train and Axles Certification examination.

Hours: 54 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

**AUTO B48WE Occupational Work Experience Education**

1-8 units

Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.

Description: College credit for automotive technology related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.

Hours: Non-paid 60 hours for each 1 unit (60-480). Paid 75 hours for each 1 unit (75-600).

Transferable: Not transferable. Degree applicable.

**AUTO B49 Automotive Air Conditioning**

4 units

Prerequisites: Successful completion of AUTO B10 with a grade of C or better.

Description: This course offers the student the skills required for accurate service, diagnosis and repair of heating and air conditioning systems. The theory and construction of heating and air conditioning systems found in automotive, agricultural and industrial applications will be covered. Demonstrated lecture, simulated problem diagnosis and practical application on "live" vehicles will be used. Preparation for the ASE A7 and T7 exams will be covered.

Hours: 54 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

**AUTO B59 Automotive Air Conditioning**

4 units

Recommended: Reading – one level prior to transfer.

Description: Prepares for the 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.

Hours: 54 lecture, 54 laboratory

Transferable: Not transferable. Degree applicable.



**AUTO B75D Advanced Engine Machning**

3 units

Prerequisites: Successful completion of AUTO B75C or equivalent with a grade of C or better.

Description: Application of engine overhaul theory and procedures, including component inspection and tolerances, is covered in this class. Advanced engine theory, design, diagnosis, repair, practical and theoretical high performance modifications are all part of this course. This class also provides additional lab hours during which the students will complete specific lab tasks associated with this class.

Materials Fee: \$15.00

Hours: 18 lecture, 108 lab

Transferable: Not transferable. Degree applicable.

**BIOL - Biology Courses****BIOL B3A General Biology I**

5 units

Prerequisites: BC placement into reading level 06 and math level 04 or successful completion of ACDV B50 or ACDV B61 or equivalent and MATH B70 or equivalent with a grade of C or better.

Description: This course is intended for biology majors. It is considered a survey course, as it covers basic biology and the diversity of unicellular and multicellular organisms.

This course also emphasizes general biological principles, classification, structure, function and evolutionary adaptations of organisms (including plants, fungi, animals, and unicellular organisms) to their environments.

Hours: 54 lecture, 108 lab

C-ID: BIOL B135S (When BIOL B3A and B3B are both taken)

Transferable: UC, CSU and private colleges; IGETC 5.B; IGETC 5.C; CSU GE B.2; CSU GE B.3; BC GE B.1

**BIOL B3B General Biology II**

5 units

Prerequisites: Successful completion of CHEM B1A with or equivalent with a grade of C or better.

Description: Principles of cell biology, molecular biology, metabolism, biochemistry, molecular genetics, and physiology. Field trips required.

Hours: 54 lecture, 108 lab

C-ID: BIOL 135S (When BIOL B3A and B3B are both taken)

Transferable: UC, CSU and private colleges; IGETC 5.B; IGETC 5.C; CSU GE B.2; CSU GE B.3; BC GE Area B.1

**BIOL B11 Concepts of Biology**

4 units

Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.

Description: 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. Field trips may be required.

Hours: 54 lecture, 54 lab

Transferable: UC, CSU and private colleges; IGETC 5.B; IGETC 5.C; CSU GE B.2; CSU GE B.3; BC GE B.1

**BIOL B16 General Microbiology**

5 units

Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 and BIOL B3A or BIOL B3B or BIOL B32 or BIOL B33 or BIOL B20 and CHEM B11 or CHEM B1A or CHEM B18 or equivalent with a grade of C or better.

Description: 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. Field trips required.

Hours: 54 lecture, 108 lab

Transferable: UC, CSU and private colleges; IGETC 5.B; IGETC 5.C; CSU GE B.2; CSU GE B.3; BC GE B.1

**BIOL B18 Essentials of Human Anatomy and Physiology**

4 units

Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.

Description: 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, muscular, cardiovascular, lymphatic/immune, respiratory, digestive, excretory, nervous, endocrine, reproductive and integumentary. Additional topics will address cell structure and function, human development and human heredity.

Hours: 54 lecture, 54 lab

Transferable: CSU and private colleges; CSU GE B.2; CSU GE B.3; BC GE B.1

**BIOL B21 Special Projects in Biology**

0.5-2 units

Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better and any college biology course with a grade of C or better.

Description: Individually directed work in biology lab. Students will learn biological preparation, and/or development of teaching materials while assisting in a biology lab.

Hours: 27 lab hours for each .5 unit (27-108)

Transferable: CSU and private colleges.

**BIOL B32 Human Anatomy and Physiology I**

4 units

Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.

Description: This is the first part of a two-semester integrated anatomy and physiology sequence that covers the structure, function, integration and homeostasis of the human body at the cellular, tissue, organ, organ system and organism level, including the integumentary, skeletal, muscular, nervous, sensory, cardiovascular, lymphatic, immune, respiratory, urinary, digestive, endocrine, and reproductive systems. This series meets the diverse needs of students seeking careers in such allied health fields as nursing, pharmacy, and physician's assistant. It is strongly recommended that students complete the entire Anatomy and Physiology sequence at the same institution as

the material may not be covered in the same semester order at different schools. Therefore students taking one semester at one school may not be given credit for the same semester at a different school.

Note: Completion of BIOL B32 and B33 is equivalent to C-ID BIOL 115S, where credit is given for both Human Anatomy (C-ID BIOL 110) and Human Physiology (C-ID BIOL 112) by completing a two-semester blended course. BIOL B32 or BIOL B33 alone do not give credit for C-ID BIOL 110 (Anatomy) or C-ID BIOL 112 (Physiology) but only 4 units for a GE lab science.

Hours: 54 lecture, 54 lab

C-ID: BIOL 115S (When BIOL B32 and B33 are both taken)

Transferable: UC, CSU and private colleges; IGETC 5.B; IGETC 5.C; CSU GE B.2; CSU GE B.3; BC GE B.1

### **BIOL B33 Human Anatomy and Physiology II**

4 units

Prerequisites: Successful completion of BIOL B32 with a grade of C or better.

Description: This is the second part of a two-semester integrated anatomy and physiology sequence that covers the structure, function, integration and homeostasis of the human body at the cellular, tissue, organ, organ system and organism level, including the integumentary, skeletal, muscular, nervous, sensory, cardiovascular, lymphatic, immune, respiratory, urinary, digestive, endocrine, and reproductive systems. This series meets the diverse needs of students seeking careers in such allied health fields as nursing, pharmacy, and physician's assistant. It is strongly recommended that students complete the entire Anatomy and Physiology sequence at the same institution as the material may not be covered in the same semester order at different schools. Therefore, students taking one semester at one school may not be given credit for the same semester at a different school.

Note: Completion of BIOL B32 + BIOL B33 is equivalent to C-ID BIOL 115S, where credit is given for both Human Anatomy (C-ID BIOL 110) and Human Physiology (C-ID BIOL 112) by completing a 2 semester blended course. BIOL B32 or BIOL B33 alone do not give credit for C-ID BIOL 110 (Anatomy) or C-ID BIOL 112 (Physiology) but only 4 units for a G.E. lab science.

Hours: 54 lecture, 54 lab

C-ID: BIOL 115S (When BIOL B32 and B33 are both taken)

Transferable: UC, CSU and private colleges; IGETC 5.B; IGETC 5.C; CSU GE B.2; CSU GE B.3; BC GE B.1

## **BSAD - Business Administration Courses**

### **BSAD B1 Financial Accounting**

4 units

Prerequisites: BC placement into reading level 06 and math level 04 or successful completion of ACDV B50 or ACDV B61 or equivalent and MATH B70 or equivalent with a grade of C or better.

Description: This is the study of accounting as an information system, examining why it is important and how it is used by investors, creditors, and others to make decisions. The course covers the accounting information system, including recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted

accounting principles, the financial statements, and statement analysis. Includes issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls, and ethics.

Hours: 72 lecture

C-ID: ACCT 110

Transferable: UC, CSU and private colleges

### **BSAD B2 Managerial Accounting**

3 units

Prerequisites: Successful completion of BSAD B1 or equivalent with a grade of C or better.

Description: This is the study of how managers use accounting information in decision-making, planning, directing operations, and controlling. Focuses on cost terms and concepts, cost behavior, cost structure and cost-volume-profit analysis. Includes issues relating to cost systems, cost control, profit planning, and performance analysis in manufacturing and service environments.

Hours: 54 lecture

C-ID: ACCT 120

Transferable: UC, CSU and private colleges

### **BSAD B5 Human Relations and People Skills**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: A behavior approach to the business environment including self-understanding, motivation techniques as related to the workplace and issues affecting 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 the important facets of communication and skill building.

Hours: 54 lecture

Transferable: CSU and private colleges.

### **BSAD B9 Fundamentals of Marketing**

3 units

Recommended: BC placement into reading level 06.

Description: Survey of marketing, including consumer behavior, company and environmental analysis, market segmentation, product development, pricing, promotion, and distribution.

Hours: 54 lecture

Transferable: CSU and private colleges.

### **BSAD B18 Business Law**

3 units

Recommended: BC placement into reading level 06.

Description: Fundamental legal principles pertaining to business transactions. Introduction to the legal process. Topics include sources of law and ethics, contracts, torts, agency, criminal law, business organizations, and judicial and administrative processes.

Hours: 54 lecture

C-ID: BUS 125

Transferable: UC, CSU and private colleges

### **BSAD B20 Introduction to Business**

3 units

Recommended: BC placement into reading level 06.

Description: A survey in business providing a multidisciplinary examination of how culture, society, economic systems, legal, international, political, financial institutions, and human

behavior interact to affect a business organization's policy and practices within the U.S. and a global society. Demonstrates how these influences impact the primary areas of business including: organizational structure and design; leadership, human resource management, organized labor practices; marketing; organizational communication; technology; entrepreneurship; legal, accounting, financial practices; the stock and securities market; and therefore affect a business ability to achieve its organizational goals.

Hours: 54 lecture

C-ID: BUS 110

Transferable: UC, CSU and private colleges; BC GE D.2

### **BSAD B40 Personal Finance**

3 units

Recommended: BC placement into reading level 06 and math level 03.

Description: Principles and skills of budgeting, making intelligent consumer choices related to consumer credit, banking services, insurance, taxes, transportation, investing for personal retirement, and real estate planning.

Hours: 54 lecture

Transferable: CSU and private colleges.

### **BSAD B43 Principles of Management**

3 units

Recommended: BC placement into reading level 06.

Description: 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.

Hours: 54 lecture

Transferable: CSU and private colleges.

### **BSAD B48WE Occupational Work Experience Education**

1-8 units

Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.

Description: College credit for business related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.

Hours: Non-paid 60 hours for each 1 unit (60 - 480). Paid 75 hours for each 1 unit (75 - 600).

Transferable: CSU and private colleges.

### **BSAD B51 Business Mathematics**

3 units

Description: 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.

Hours: 54 lecture

Transferable: Not transferable. Degree applicable.

### **BSAD B53A Introduction to Accounting 1**

3 units

Recommended: BC placement into reading level 05.

Description: 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.

Hours: 54 lecture

Transferable: Not transferable. Degree applicable.

### **BSAD B53B Introduction to Accounting 2**

3 units

Prerequisites: Successful completion of BSAD B53A or equivalent with a grade of C or better.

Description: A continuation of an introduction to modern financial accounting theory and practice. Analysis of financial transactions peculiar to the partnership and inventory, accounts receivable, notes payable, notes receivable and drafts, depreciation, depletion and amortization, capital stock transactions, bonds and other long-term liabilities and Statement of Cash Flows.

Hours: 54 lecture

Transferable: Not transferable. Degree applicable.

### **BSAD B54 Payroll Accounting**

3 units

Prerequisites: Successful completion of BSAD B1 or BSAD B53A or equivalent with a grade of C or better.

Description: A foundation in payroll computations, payroll record keeping, and the filing of quarterly and annual payroll tax reports. Involves the study of California Disability Insurance, California Unemployment Insurance, Federal Social Security, Federal Unemployment Insurance, Federal Income Tax and California Income Tax, and how these taxes affect the employee/employer.

Hours: 54 lecture

Transferable: Not transferable. Degree applicable.

### **BSAD B55 Computer Accounting Applications**

3 units

Prerequisites: Successful completion of BSAD B1 or BSAD B53B or equivalent with a grade of C or better.

Description: 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.

Hours: 54 lecture

Transferable: Not transferable. Degree applicable.

### **BSAD B61 Human Resources Management**

3 units

Description: 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 private and public sectors

Hours: 54 lecture

Transferable: Not transferable. Degree applicable.

### **BSAD B65 Principles of Organizational Communication**

3 units

Description: Examination of written and oral communication in the business world. Course will examine 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. Focuses on writing letters, memorandums, e-mails, resumes, reports and oral presentations. Course will define the barriers to effective communication and teach the appropriate techniques to overcome poor communication skills.

Hours: 54 lecture

Transferable: Not transferable. Degree applicable.

### **BSAD B85 Business English**

3 units

Description: 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 lecture

Transferable: Not transferable. Degree applicable.

### **BSAD B88 Office Procedures**

3 units

Description: A finishing course for students completing their training in office assisting. Course focuses on the techniques currently taking place in the office environment and is designed to develop knowledge and skills necessary for success in the workplace. 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 lecture

Transferable: Not transferable. Degree applicable.

### **BSAD B90 Fundamentals of Retailing**

3 units

Description: 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.

Hours: 54 lecture

Transferable: Not transferable. Degree applicable.

### **BSAD B252A Computer Keyboarding, Part 1**

1 unit

Description: 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. This is a basic course in the Office Technology curriculum and is a life-long learning skill.

Hours: 54 lab

Transferable: Not transferable. Degree applicable.

### **BSAD B252B Computer Keyboarding, Part 2**

1 unit

Prerequisites: Successful completion of BSAD B252A or equivalent with a grade of C or better.

Description: A continuation course where 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 skill. Open entry/open exit course with individualized instruction in a supervised lab.

Hours: 54 lab

Transferable: Not transferable. Degree applicable.

### **BSAD B252C Computer Keyboarding, Part 3**

1 unit

Prerequisites: Successful completion of BSAD B252B or equivalent with a grade of C or better.

Description: The third part in a series where 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 skill. Open entry/open exit course with individualized instruction in a supervised lab.

Hours: 54 lab

Transferable: Not transferable. Degree applicable.

### **BSAD B253A Document Processing, Part 1**

1 unit

Prerequisites: Successful completion of BSAD B252C or equivalent with a grade of C or better.

Description: 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. Open entry/open exit course with individualized instruction in a supervised lab.

Hours: 54 lab

Transferable: Not transferable. Degree applicable.

### **BSAD B253B Document Processing, Part 2**

1 unit

Prerequisites: Successful completion of BSAD B253A or equivalent with a grade of C or better.

Description: The second part in the series where student 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. Open entry/open exit course with individualized instruction in a supervised lab.

Hours: 54 lab

Transferable: Not transferable. Degree applicable.

### **BSAD B253C Document Processing, Part 3**

1 unit

Prerequisites: Successful completion of BSAD B253B or equivalent with a grade of C or better.

Description: The third in the series where student 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. Open entry/open exit course with individualized instruction in a supervised lab.

Hours: 54 lab

Transferable: Not transferable. Degree applicable.

### **BSAD B264 Ten-Key Proficiency**

0.5 unit

Description: 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. Open entry/open exit course with individualized instruction in a supervised lab

Hours: 27 lab

Transferable: Not transferable. Degree applicable.

### **BSAD B280 Machine Transcription**

1.5 units

Prerequisites: Successful completion of BSAD B252C and BSAD B85 or BSAD B285 with a grade of C or better.

Description: Students learn the skill of operating transcribing machines and develop skill in keying documents while listening to dictated material. Practice in transcribing letters, memoranda, and other business correspondence is stressed. Course emphasizes English usage, punctuation, spelling/word usage, and proper document formatting when transcribing data. Open entry/open exit course with individualized instruction in a supervised lab.

Hours: 81 lab

Transferable: Not transferable. Degree applicable.

### **BSAD B285 Business English**

3 units

Description: 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: 162 lab

Transferable: Not transferable. Degree applicable.

### **BSAD B287 Filing**

1.5 units

Description: Training in principles of filing and records management according to the Association of Records Managers and Administrators (ARMA). Study and practice in filing by alphabetic, numeric, geographic, and subject methods. Open entry/open exit course with individualized instruction in a supervised lab.

Hours: 81 lab

Transferable: Not transferable. Degree applicable.

## **CADM - Correctional Administration Courses**

### **CADM B54 Corrections Officer Core Course**

12 units

Description: This course is designed to meet the Corrections Standards Authority requirements for entry-level Corrections Officers in Adult Detention Facilities. This course covers various legal issues in dealing with incarcerated offenders as well as supervision of inmates. Transportation, report writing, blood borne pathogens, CPR, First Aid, receiving and releasing of inmates, weaponless defense, Fire and Life Safety.

Hours: 216 lecture

Transferable: Not transferable. Not degree applicable.

### **CADM B56 Criminal Justice Training-Special Topics**

0.5-7 units

Description: This is a series of workshop/seminar sessions devoted to instruction in specialized topics pertinent to criminal justice administration. The course will feature speakers or panels of specialists from the law enforcement or corrections fields who have expertise in the particular subject area.

Hours: 8 lecture hours for each .2 unit (9-126)

Transferable: Not transferable. Not degree applicable.

### **CADM B58 Supervisor Core Course**

4.5 units

Description: This course teaches supervisory skills such as supervisory role identification, leadership styles, values, ethics, principles, assertive leadership, employee performance appraisals, liability issues and legal updates, discipline, employee counseling, planning and organization, communication, investigations, report review, and team building. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections (STC) Program (as described in Section 181, Title 15, CCR).

Hours: 81 lecture

Transferable: Not transferable. Not degree applicable.

### **CADM B70A Prisoner Transportation**

0.5 units

**Description:** This course teaches skills associated with the transportation of prisoners and 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70B Prison Gangs**

0.5 units

**Description:** Topics include identifying known prison gangs, gang member identification/activities, policies on gang validation, gang 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.

**Note:** Registration will be held during the first hour of the first class meeting.

**Hours:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70C Escape Prevention**

0.5 units

**Description:** Teaches 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70D Suicide Prevention**

*0.5 units*

**Description:** 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70E Handling Aggressive and Assaultive Inmates**

*0.5 units*

**Description:** 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70F Sexual Harassment Prevention**

*0.5 units*

**Description:** 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70G Understanding Prejudice**

*0.5 units*

**Description:** Teaches tolerance of others who are unlike oneself, to make for cultural differences, values and beliefs. Adjusts preconceptions and misconceptions, attitudes and encourages communication styles without implications of discrimination. 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70H Crime Scene Preservation and Investigation**

*0.5 units*

**Description:** 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70I Anger Management**

*0.5 units*

**Description:** Designed to provide students with tools to control their own anger as well as provide 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70J Informant Development and Management**

*0.5 units*

**Description:** 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70K Anatomy of a Set-Up; Games Inmates Play**

*0.5 units*

**Description:** Students will develop a greater understanding of criminal thinking & behavior. This course will provide the student with the knowledge and communication skills to prevent or stop a set-up. Students will be able to identify and recite the signs and behaviors that contribute and make employees receptive to a set-up and to attempts at "game playing" by inmates.

**Hours:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70L Use of Force and Civil Liabilities**

*0.5 units*

**Description:** Students will identify and discuss 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70M Drug Recognition and Under the Influence**

*0.5 units*

**Description:** 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 Corrections Program.

**Hours:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70N Fire and Life Safety**

*0.5 units*

**Description:** 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, use of the SCBA, search and rescue techniques. Meets the certification requirements for Standards and Training in Corrections (STC) from the California Board of Corrections.

Note: Registration will be held during the first hour of the first class meeting.

**Hours:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B700 Positive Inmate Staff Relations Through Communication and Ethics**

*0.5 units*

**Description:** Develops practical communication and ethical skills toward a positive inmate/staff working relationship in a jail/institutional environment. This course meets the requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70P Emergency Procedures**

*0.5 units*

**Description:** Designed for corrections staff. Provides an overview of various emergencies arising within a correctional facility, including natural disasters, riots, work strikes, escapes. Policy, planning and response are discussed. 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70R Inmate Work Incentive Program**

*0.5 units*

**Description:** Prepares students to supervise inmates in a correctional environment and provide a better understanding of prisoner programs. 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 meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70S Women in Corrections**

*0.5 units*

**Description:** 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, developing a mentoring program for the female correctional staff. This course meets the training requirements as set forth by Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70T Blood Borne Pathogens, T.B. Awareness, Psychotic Inmates**

*0.5 units*

**Description:** 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70U Conflict Resolution and Hostage Survival**

*0.5 units*

**Description:** Covers Conflict Resolution: develop skills to defuse and de-escalate confrontational situations. Course includes: tactics and techniques to avoid being taken hostage, and what to do if you are 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70V Facility and Inmate Searches**

*0.5 units*

**Description:** Develops and enhances the knowledge and skills of searching both inmates and facilities. This course covers: searching techniques, clothed and unclothed body searches, and the current trends of introduction of contraband into a Correctional 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70W Restraint Gear Application**

*0.5 units*

**Description:** Provides explanation and hands-on practice for the proper application and use of restraints 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70X Cell Extraction**

*0.5 units*

**Description:** Provides knowledge and skills to perform calculated and emergency cell extractions in a safe manner. Course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Note:** Registration will be held during the first hour of the first class meeting.

**Hours:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

### **CADM B70Z Inmate Classification/Disciplinary Process**

*0.5 unit*

**Description:** Provides an introduction to the inmate classification process. Describes the basic procedure for assigning an inmate to a particular job based on security level and defines how the disciplinary process is a part of the classification process. Class meets the certification requirements for Corrections Standards Authority for countries participating in the Standards and Training for Corrections Program.

**Hours:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

**CADM B71A Basic Principles in Management***1 unit*

**Description:** An introduction to best practices of two-way communication between administration and line staff to ensure good facility management. Students will develop their leadership and communication skills. The art of discipline and grievances will be explored. 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:** 18 lecture**Transferable:** Not transferable. Not degree applicable.**CADM B71F Drug and Alcohol Awareness for Supervisors***0.5 units*

**Description:** Provides training to law enforcement, corrections and security supervisors (also recommended for educators). Prepares students to identify and determine whether an employee is under the influence of alcohol or drugs. Other topics include how supervisors can solicit help for employees to overcome substance abuse/addiction. The 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:** 9 lecture**Transferable:** Not transferable. Not degree applicable.**CADM B71G Advanced Report Writing***0.5 units*

**Description:** This course is designed to provide advanced skills in report writing. Students will refresh and enhance the writing skills they developed in the basic course. 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.

**Note:** Registration will be held during the first hour of the first class meeting.

**Hours:** 9 lecture**Transferable:** Not transferable. Not degree applicable.**CADM B71H Transportation and Escape Procedures***0.5 units*

**Description:** Intended for peace officers, correctional officers, juvenile institutions staff, and probation officers. Introduces students 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:** 9 lecture**Transferable:** Not transferable. Not degree applicable.**CADM B71I Violence in the Workplace***0.5 units*

**Description:** A discussion of fatal and nonfatal violence in the workplace to determine the focus needed for prevention. Emphasis made on changes to help minimize or remove the risk of workplace violence. Meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 9 lecture**Transferable:** Not transferable. Not degree applicable.**CADM B71K Rights of Prisoners***0.5 unit*

**Description:** An introduction and discussion of 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:** 9 lecture**Transferable:** Not transferable. Not degree applicable.**CADM B71L Progressive Discipline***0.5 units*

**Description:** This course teaches methods 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:** 9 lecture**Transferable:** Not transferable. Not degree applicable.**CADM B71M Stress in the Corrections Environment***0.5 units*

**Description:** Intended for people working in corrections. Course will identify and discuss what stress is, 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. 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:** 9 lecture**Transferable:** Not transferable. Not degree applicable.**CADM B71N Positive Thinking in Corrections***0.5 units*

**Description:** This course identifies and discusses the premise that a positive attitude in the correctional workplace fosters job satisfaction, builds self-esteem, and reinforces desired performance. 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:** 9 lecture**Transferable:** Not transferable. Not degree applicable.**CADM B71O Assertiveness Training for Corrections***0.5 units*

**Description:** Trains Correctional Officers to present themselves as confident, effective communicators and therefore enjoy better inmate control and institutional effectiveness. Course meets the training requirements as set forth by the Corrections Standards for counties participating in the Standards and Training for Corrections Program.

**Hours:** 9 lecture**Transferable:** Not transferable. Not degree applicable.**CADM B71P Employee Post Trauma***0.5 units*

**Description:** This course 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

#### **CADM B71Q Liability Issues and Courtroom Demeanor**

*0.5 units*

**Description:** This course is an introduction to the legal liabilities and responsibilities of corrections personnel while at work and expectancies when called to testify in a court of law. Other topics include: identification of adverse employees, insufficient training, and negligent supervision among others. 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

#### **CADM B71R Prison Rape Elimination Act (PREA)**

*0.5 units*

**Description:** Provides the skills necessary to investigate complaints, threats, or signs of sexual assault/rape against inmates. 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

#### **CADM B72 Chemical Agents**

*0.5 units*

**Description:** This course 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

#### **CADM B73 Basic Baton Course**

*0.5 units*

**Description:** 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.

**Note:** Registration will be held during the first hour of the first class meeting.

**Hours:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

#### **CADM B74 Weaponless Defense and Control Tactics**

*0.5 units*

**Description:** This course provides training 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.

**Note:** Registration will be held during the first hour of the first class meeting.

**Hours:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

#### **CADM B75 Surviving Sharp Edged Weapons**

*0.5 units*

**Description:** The course teaches responses to the mounting threat of "knife culture" offenders. Topics covered included safe positioning, communicating commands to inmates, how to access 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:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

#### **CADM B76 Basic Firearms Familiarization**

*0.5 units*

**Description:** 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.

**Note:** Registration will be held during the first hour of the first class meeting.

**Hours:** 9 lecture

**Transferable:** Not transferable. Not degree applicable.

#### **CADM B77 Intermediate Firearms Course**

*1 unit*

**Description:** 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 handling; 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:** 18 lecture

**Transferable:** Not transferable. Not degree applicable.

#### **CADM B79 Federal Prison Emergency Response Training**

*4.5 units*

**Description:** This course teaches advanced training for Correctional Emergency Response Team (CERT) skills. 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 for Corrections Standards Authority for counties participating in the Standards and Training for Corrections Programs.

**Hours:** 81 lecture

**Transferable:** Not transferable. Not degree applicable.

# CHDV - Child Development Courses

## **CHDV B13C Child Growth and Development: The Infant Toddler Years**

3 units

Recommended: BC placement into reading level 06.

Description: 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.

Hours: 54 lecture

Transferable: CSU and private colleges.

## **CHDV B20 Principles and Practices**

3 units

Recommended: BC placement into reading level 06.

Description: 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 development for all children. 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. Formerly CHDV B20, Introduction to Child Growth and Development.

Hours: 54 lecture

C-ID: ECE 120

Transferable: CSU and private colleges.

## **CHDV B21 Child Growth and Development: Birth through Adolescence**

3 units

Recommended: Successful completion of CHDV B20 with a grade of C or better and BC placement into reading level 06.

Description: 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.

Hours: 54 lecture

C-ID: CDEV 100

Transferable: UC, CSU and private colleges; IGETC 4; CSU GE D.7; CSU GE E; BC GE D.1

## **CHDV B22 Observation and Assessment - Birth through Adolescence**

3 units

Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 and CHDV B21 or equivalent with a grade of C or better.

Description: Course includes acquisition and application of basic observation skills regarding children's physical, cognitive, language, social and emotional development from birth to adolescence.

Hours: 54 lecture

C-ID: ECE 200

Transferable: CSU and private colleges.

## **CHDV B32 Teaching in a Diverse Society**

3 units

Description: The relationship between critical aspects of culture and the social-emotional development of children, adolescents and adults is analyzed from an anti-bias, multi-cultural perspective. Diversity is examined through the different values, beliefs, modes of communicating, behaving and perceiving the world.

C-ID: ECE 230

Hours: 54 lecture

Transferable: CSU and private colleges.

## **CHDV B33 Survey of Special Education**

3 units

Recommended: BC placement into reading level 06.

Description: 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 the child care professionals and paraprofessionals in the field of special education.

Hours: 54 lecture

Transferable: CSU and private colleges.

## **CHDV B36 Developmentally Appropriate Curriculum**

3 units

Description: 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 and provide an appropriate environment.

C-ID: ECE 130

Hours: 54 lecture

Transferable: CSU and private colleges.

## **CHDV B40 Creative Art, Movement, and Music Activities for Young Children**

3 units

Recommended: BC placement into reading level 06.

Description: 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 #4-7.

Hours: 54 lecture

Transferable: CSU and private colleges.

## **CHDV B41 Supervised Field Experience in Early Childhood Education**

3 units

Prerequisites: Successful completion of CHDV B20 and CHDV B21 and CHDV B36 and CHDV B42 or equivalent with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: Basic techniques of working with children including promoting self-esteem; creativity; self-discipline; development of physical and cognitive skills; and planning appropriate curriculum, connections between theory and practice, development of professional behaviors, child centered approaches to teaching, learning, and assessment, implementing

and evaluating experiences that promote positive development and learning. 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.

Note: Not open to students who have successfully completed CHDV B41A or CHDV B41B.

C-ID: ECE 210

Hours: 18 lecture, 108 lab

Transferable: CSU and private colleges.

### **CHDV B42 Child, Family, and Community**

3 units

Description: Course includes the study of the socializing 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. Field trips may be required.

C-ID: CDEV 110

Hours: 54 lecture

Transferable: UC, CSU and private colleges; CSU GE D.7; CSU GE E

### **CHDV B45A Administration of Programs for Young Children: Business Procedures**

3 units

Recommended: BC placement into reading level 06.

Description: Administration of programs for young children including private and publicly-funded child care centers and preschool programs. Emphasizes business procedures and public policy. Field trips required.

Hours: 54 lecture

Transferable: CSU and private colleges.

### **CHDV B45B Administration of Programs for Young Children: Personnel Management Procedures**

3 units

Description: Administration of programs for young children including private and publicly-funded child care centers and preschool programs. Emphasizes personnel management and public policy.

Hours: 54 lecture

Transferable: CSU and private colleges.

### **CHDV B49 Child Health, Safety and Nutrition**

3 units

Recommended: BC placement into reading level 06.

Description: 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 everyday 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.

C-ID: ECE 220

Hours: 54 lecture

Transferable: CSU and private colleges.

### **CHDV B52 Care of Infants and Toddlers with Disabilities**

3 units

Description: Interdisciplinary course designed to prepare child care workers and education aides to care for disabled and chronically ill infants and toddlers.

Hours: 54 lecture

Transferable: Not transferable. Degree applicable.

### **CHDV B53A Early Childhood Education: Adult Supervision**

2 units

Description: 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 the children and parents.

Hours: 36 lecture

Transferable: Not transferable. Not degree applicable.

## **CHEM - Chemistry Courses**

### **CHEM B1A General Chemistry I**

5 units

Prerequisites: BC placement into reading level 06 and writing level 06 and math level 04 or successful completion of ACDV B50 or ACDV B61 or equivalent and ENGL B50 or equivalent and MATH B70 or equivalent CHEM B2A or High School Chemistry, or equivalent with a grade of C or better.

Description: Basic principles of chemistry, including atomic structures, 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 lab emphasizes quantitative methods.

C-ID: CHEM 110 (Taking both CHEM B1A AND CHEM B1B is the C-ID Equivalent of CHEM 120S)

Hours: 54 lecture, 108 lab

Transferable: UC, CSU and private colleges; IGETC 5.A; IGETC 5.C; CSU GE B.1; CSU GE B.3; BC GE B.1

### **CHEM B1B General Chemistry and Chemical Analysis**

5 units

Prerequisites: BC placement into math level 04 or successful completion of MATH B70 and CHEM B1A or equivalent with a grade of C or better.

Recommended: Chemistry prerequisite accomplished within two years prior to taking this class.

Description: 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 lab includes qualitative analysis, quantitative techniques, and descriptive experiments.

C-ID: CHEM 120S (for taking CHEM B1A + B1B)

Hours: 54 lecture, 108 lab

Transferable: UC, CSU and private colleges

**CHEM B2A Introductory General Chemistry**

4 units

Prerequisites: BC placement into reading level 06 and writing level 06 and math level 03 or successful completion of ACDV B50 or ACDV B61 or equivalent and ENLG B50 or equivalent and MATH B60 or equivalent with a grade of C or better.

Description: Course covers the principles and applications of general college chemistry. It is 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.

Note: Not open to students with credit in CHEM B1A.

C-ID: CHEM 101

Hours: 54 lecture, 54 lab

Transferable: UC, CSU and private colleges; IGETC 5.A; IGETC 5.C; CSU GE B.1; CSU GE B.3; BC GE B.1

**CHEM B11 Introduction to General, Organic, and Biochemistry**

5 units

Prerequisites: BC placement into reading level 06 and math level 03 or successful completion of ACDV B50 or ACDV B61 or equivalent and MATH B60 or equivalent with a grade of C or better.

Description: 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, composition, reactions in living organisms.

Hours: 54 lecture, 108 lab

Transferable: UC, CSU and private colleges; IGETC 5.A; IGETC 5.C; CSU GE B.1; CSU GE B.3; BC GE B.1

**CHEM B18 Elementary Organic Chemistry**

5 units

Prerequisites: Successful completion of CHEM B1A or equivalent with a grade of C or better or CHEM B2A or equivalent with a grade of B or better or instructor's approval.

Description: Introduction to and study of the chemistry of organic compounds: the functional groups, representative types of, theory behind, organic reactions, and the biological classes of proteins, fats, carbohydrates, and nucleic acids. 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 lab covers fundamental techniques including separations, synthesis, identification, and instrumental analysis.

Hours: 54 lecture, 108 lab

Transferable: UC, CSU and private colleges; IGETC 5.A; IGETC 5.C; CSU GE B.1; CSU GE B.3; BC GE B.1

**CHEM B30A Organic Chemistry for Science Majors, I**

5 units

Prerequisites: Successful completion of CHEM B1B with a grade of C or better.

Description: This is the first semester of a one-year course in organic chemistry intended for majors in the natural sciences (chemistry, biochemistry, biology, physics, pre-medicine, and related areas). Taken as a sequence, the course covers fundamental principles and concepts of organic chemistry including (but not limited to) bonding, molecular structure, the standard functional groups, nomenclature, stereochemistry, reactions, and mechanisms. Strong emphasis is placed on

reaction mechanisms, stereochemistry, multi-step syntheses, and structure elucidation using hands-on modern instrumental methods (multinuclear NMR, FT-IR, GC, etc.). In addition, various modern computational techniques and an introduction to bio-molecules are presented. The lab covers preparative and modern analytical techniques and instrumentation, exposure to a variety of reactions and procedures, performing multistep syntheses, and safety and ecologically friendly protocols.

Hours: 54 lecture, 108 lab

C-ID: CHEM 160S (Taking both CHEM B30A AND CHEM B30B is the C-ID Equivalent of CHEM 160S)

Transferable: UC, CSU and private colleges; CSU GE B.1

**CHEM B30B Organic Chemistry for Science Majors, II**

5 units

Prerequisites: Successful completion of CHEM B30A with a grade of C or better.

Description: This is the second semester of a one-year course in organic chemistry intended for majors in the natural sciences (chemistry, biochemistry, biology, physics, pre-medicine, and related areas). Taken as a sequence, the course covers fundamental principles and concepts of organic chemistry including, but not limited to structure, bonding, nomenclature, stereochemistry, the standard functional groups, reactions, and mechanisms. Special emphasis is placed on reaction mechanisms, stereochemistry of reactions, multi-step syntheses, and structure elucidation using modern instrumental methods (multinuclear NMR, FT-IR, GC, etc.). In addition, various modern computational techniques and an introduction to bio-molecules are presented.

Hours: 54 lecture, 108 lab

C-ID: CHEM 160S

Transferable: UC, CSU and private colleges; CSU GE B.1

## CNST - Construction Technology Courses

**CNST B1 Introduction to Construction**

3 units

Description: Basic concepts of the construction industry. Overview of careers in construction, related safety and math, print reading, and construction techniques investigated.

Hours: 54 lecture

Transferable: CSU and private colleges.

**CNST B2 Estimating and Scheduling**

3 units

Recommended: Successful completion of CNST B1 with a grade of C or better, or one year work experience in the construction related industry and BC placement into reading level 06.

Description: 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. 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.

Hours: 54 lecture

Transferable: CSU and private colleges.

**CNST B3 Construction Supervision and Project Management**

3 units

Description: The combination of designing, estimating, contracting, financing and building must be understood and practiced. Leadership in this field means being responsible for many people, their work and their safety.

Hours: 54 lecture

Transferable: CSU and private colleges. Degree applicable.

**CNST B4 Contractor's License Law**

2 units

Description: Preparation for the California State Contractor Examination in any classification. Includes state license law, civil code, civil procedure, labor law, contract law, and asbestos regulations.

Hours: 36 lecture

Transferable: Not transferable.

**CNST B5 Building Construction I**

4 units

Description: Technical and practical experience to complete floor and wall framing of a house including underpinning, wall layout, and wall construction up to the ceiling joists. Estimating of materials, basic surveying, and concrete foundation formwork are also covered.

Hours: 54 lecture, 54 lab

Transferable: Not transferable.

**CNST B6 Building Construction II**

4 units

Description: The study of roof design and cutting, the use of the framing square in roof layout, and prefabrication techniques in housing with field research assignments. Frame estimating for the building trades and the application of various roofing materials are also covered.

Hours: 54 lecture, 54 lab

Transferable: Not transferable.

**CNST B7 Residential Finish Construction**

4 units

Description: This course covers interior and exterior building finishes, including layout fabrication and installation of stairs, door and window materials, construction, hardware and installation, interior and exterior millwork, molding and cabinetry; interior drywall and exterior siding, stucco plastering and EIFS systems. Building codes and finish estimating are included.

Hours: 54 lecture, 54 lab

Transferable: Not transferable.

**CNST B8 Plumbing I**

4 units

Description: A course designed to provide students with entry-level instruction involving the theory and skills of residential plumbing systems. Knowledge of basic principles, functions and design, as well as the physical ability to install and test the rough-in plumbing in a single family dwelling.

Hours: 54 lecture, 54 lab

Transferable: Not transferable.

**CNST B9 Residential Electrical Wiring**

4 units

Description: Residential electrical construction, wiring principles and practices, study and application of National Electrical Code

(NEC) to comply with building requirements.

Hours: 54 lecture, 54 lab

Transferable: Not transferable.

**CNST B10 Plumbing II**

4 units

Description: A course designed to provide students with entry-level instruction involving the theory and skills of residential plumbing systems. Topics include basic principles, function, design, installation of finish plumbing, repair and service of plumbing systems, installation of solar, spa, and sprinkler systems in a single family dwelling.

Hours: 54 lecture, 54 lab

Transferable: Not transferable.

**CNST B11 Residential Light Steel Frame Construction**

4 units

Description: A comprehensive hands-on course that covers the fundamentals of utilizing light frame steel for residential framing in place of wood. Raised floor construction, wall framing, trussed roof fabrication and installation including applicable building codes, blueprint reading, estimating, and inspections are covered.

Hours: 54 lecture, 54 lab

Transferable: Not transferable.

**CNST B48WE Occupational Work Experience Education**

1-8 units

Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.

Recommended: BC placement into reading level 06.

Description: College credit for construction related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid work experience or 60 volunteer hours of work experience per unit. Repetition allowed per Title 5 55253.

Hours: Non-paid 60 hours for each 1 unit (60-480). Paid 75 hours for each 1 unit (75-600).

Transferable: Not transferable

**CNST B50A Residential Construction**

7 units

Recommended: BC placement into reading level 06.

Description: Intended to provide students with an overview of the construction profession. Various aspects of residential construction from site preparation through framing phases will be studied and performed. Special interest will be on construction safety, the initial phases of construction & investigation of emerging building trends & techniques. Finish carpentry & plumbing phases and techniques will also be introduced.

Hours: 54 lecture, 216 lab

Transferable: Not transferable. Degree applicable. (Pending deletion and replacement with new curriculum.)

**CNST B50B Residential Construction**

7 units

Recommended: BC placement into reading level 06.

Description: Intended to provide students with an overview of the construction profession. Various aspects of residential construction from post rough framing to final completion will be

studied and performed. Special interest will be on construction safety, the finish carpentry & electrical phases of construction & investigation of emerging building trends & techniques. Initial phases and techniques will be reviewed.

Hours: 54 lecture, 216 lab

Transferable: Not transferable. Degree applicable. (Pending deletion and replacement with new curriculum.)

## COMM - Communication Courses

### COMM B1 Public Speaking

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

C-ID: COMM 110

Transferable: UC, CSU and private colleges; IGETC 1.C; CSU GE A.1; BC GE A.1

### COMM B2 Interpersonal Communication

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: An introduction to interpersonal communication as it pertains to exploration of the individual's relationships to others and the broader society including romantic, friendship, family and professional relationships at every age. Emphasis will be put on social, physiological and cultural influences such as social interaction, verbal communication, nonverbal communication, touch, human interaction and emotion that shape personal identity and interpersonal relationships, ethical communication founded on communication theory and research, and effective conflict resolution methods. Focus will also include participation in experiences designed to enhance competence and develop skills in interpersonal communication.

Hours: 54 lecture

C-ID: COMM 130

Transferable: UC, CSU and private colleges; CSU GE: E; BC GE: E

### COMM B4 Persuasive Communication

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Principles and practices of persuasion in various communication settings. Prepare and deliver persuasive speeches for specific audiences.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 1.C; CSU GE A.1; BC GE A.1

### COMM B5 Rhetoric and Argumentation

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

C-ID: COMM 120

Transferable: UC, CSU and private colleges; CSU GE A.3; BC GE B.2

### COMM B6 Intercultural Communication

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Introduction to intercultural communication in domestic and/or global contexts. Influence of cultures, languages, and social patterns on how members of groups relate among themselves and with members of different ethnic and cultural groups. Theory and knowledge of effective communication within and between cultures. Appreciation and comparison of communication among diverse groups within the larger context of American culture. Practical application of skills will be highlighted.

Hours: 54 lecture

C-ID: COMM 150

Transferable: UC, CSU and private colleges; IGETC 4.C, 4.G; CSU GE D.3; CSU GE D.7; BC GE D.1

### COMM B7 Organizational Communication

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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 cultures 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 teams choosing.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; CSU GE D.7; BC GE D.2

### COMM B8 Small Group Communication

3 units

Description: 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.

Hours: 54 lecture

C-ID: COMM 140

Transferable: UC, CSU and private colleges; IGETC 1.C; CSU GE A.1; BC GE A.1

**COMM B9 Health Communication**

3 units

Description: 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.

Hours: 54 lecture

Transferable: CSU and private colleges.

**COMM B10 Leadership and Communication**

3 units

Description: 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.

Note: Not open to students who have successfully completed COMM B49 or COMM B49B.

Hours: 54 lecture

Transferable: CSU and private colleges.

**COMM B21 Oral Interpretation**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

C-ID: COMM 170

Transferable: CSU and private colleges; BC GE C.2

## COMP - Computer Science Courses

**COMP B2 Introduction to Computer Information Systems**

3 units

Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.

Description: Introduction to the concepts of computer information systems as problem-solving tools in business, economics, mathematics, and the sciences. Includes the history of computer system components, and sequential and direct-access processing. Database management systems, teleprocessing, and distributed processing are covered. An

overview of personal computer applications software (word processing, electronic spreadsheets, and personal database management systems) is also included.

Note: Not open to students who have successfully completed COMS B2, COMS B3, COMP B3.

C-ID: BUS 140

Hours: 54 lecture

Transferable: UC, CSU and private colleges

**COMP B5 Introduction to Microsoft Office**

3 units

Recommended: BC placement into reading level 06.

Description: 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 the listed application software.

Note: Not open to students who have successfully completed COMS B5.

Hours: 54 lecture

Transferable: CSU and private colleges.

**COMP B10 Introduction to Programming Methodologies using Python**

3 units

Recommended: BC placement into reading level 06.

Description: This course is designed as a first course in software engineering for mixed-majors, with an emphasis on the Computer Science major. Students will use the object-oriented programming language Python to learn the fundamentals of programming. Topics include: variables, sequence, selection, iteration, the software life-cycle, as well as common programming algorithms such as sorting and searching.

Note: Not open to students who have successfully completed COMS B10.

Hours: 54 lecture

C-ID: COMP 112

Transferable: UC, CSU and private colleges.

**COMP B11 Programming Concepts and Methodology I**

3 units

Prerequisites: BC placement into reading level 06 and math Level 04 or successful completion of ACDV B50 or ACDV B61 or equivalent and MATH B70 or equivalent with a grade of C or better.

Recommended: Successful completion of COMP B10 with a grade of 'C' or better or instructor approval.

Description: This course is an introduction to the discipline of computer science, with a focus on the design and implementation of algorithms to solve simple problems using a high-level programming language. Topics include fundamental programming constructs, problem-solving strategies, debugging techniques, declaration models, and an overview of procedural and object-oriented programming languages. Students will learn to design, implement, test, and debug algorithms using pseudocode and a high-level programming language.

Note: Not open to students who have successfully completed COMS B14.

Hours: 54 lecture

C-ID: COMP 122

Transferable: UC, CSU and private colleges

**COMP B12 Programming Concepts and Methodology II**

3 units

Prerequisites: Successful completion of COMP B11 or equivalent with a grade of C or better.c

Description: This is a software engineering course focused on the application of software engineering techniques for the design and development of large programs. Topics include object oriented programming, data abstraction, data structures and their associated algorithms, and recursion. Students will learn to design, implement, test, and debug programs using an object-oriented language.

Note: Not open to students who have successfully completed COMS B35.

Hours: 54 lecture

C-ID: COMP 132

Transferable: UC, CSU and private colleges

**COMP B13 Computer Architecture and Organization**

3 units

Recommended: Successful completion of COMP B11 with a grade of C or better.

Description: This course is an introduction to the organization and behavior of computer systems at the assembly language level. Topics include numerical computation, the internal representation of simple data types and structures, data representation errors, and procedural errors. Students will learn how to map statements and constructs of high-level languages onto sequences of machine instructions.

C-ID: COMP 142

Hours: 54 lecture

Transferable: UC, CSU and private colleges

**COMP B14 Discrete Structures**

3 units

Prerequisites: Successful completion of COMP B11 or equivalent with a grade of C or better.

Description: This course is an introduction to the discrete structures used in Computer Science with an emphasis on their applications. Topics covered include functions, relations and sets, basic logic, proof techniques, basics of counting, graphs and trees, and discrete probability.

C-ID: COMP 152

Hours: 54 lecture

Transferable: UC, CSU and private colleges

**COMP B21 Database Systems - Design & Structured Query Language (SQL)**

3 units

Recommended: BC placement into reading level 06.

Description: 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. 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.

Note: Not open to students who have successfully completed COMS B34.

Hours: 54 lecture

Transferable: CSU and private colleges.

**COMP B31 CompTIA Network Security - Security+**

3 units

Recommended: BC placement into reading level 06.

Description: Course is designed for individuals interested in a career in computer network security. Course prepares students for the vendor-neutral CompTIA Security+ certification exam. Topics covered are: network security, types of security threats, security vulnerability assessment, access control fundamentals, authentication, cryptography, and risk mitigation.

Hours: 54 lecture

Transferable: CSU and private colleges

**COMP B32 CompTIA Linux+**

3 units

Recommended: BC placement into reading level 06.

Description: A general introduction to Linux Installation and Administration. Covers the essentials of installing, configuring, maintaining, administering and troubleshooting the Linux Operating System.

Note: Not open to students who have successfully completed COMS B41.

Hours: 54 lecture

Transferable: CSU and private colleges.

**COMP B33 CompTIA Networking Technologies - Network+**

3 units

Recommended: BC placement into reading level 06.

Description: Designed for individuals interested in a career in computer networking. Course prepares students for the vendor-neutral CompTIA Network+ certification exam. Topics covered are: 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.

Note: Not open to students who have successfully completed COMS B82.

Hours: 54 lecture

Transferable: CSU and private colleges

**COMP B41 Web Design: Design Tools**

3 units

Recommended: BC placement into reading level 06.

Description: This course is an introductory web design course, focusing on the use of web design tools such as Adobe Dreamweaver and other similar WYSIWYG (What you see is what you get) tools to create web pages from a design perspective. Not open to students who have previously received credit for COMS B74A.

Hours: 54 lecture

Transferable: CSU and private colleges.

**COMP B42 Web Design: HTML & CSS**

3 units

Recommended: BC placement into reading level 06.

Description: This course is an introductory course in designing web pages using HTML and CSS coding. Rather than using a program to write the code, students will learn how to create basic web pages and sites from the ground up using standards-compliant coding techniques. Not open to students who have previously received credit for COMS B74B.

Hours: 54 lecture

Transferable: CSU and private colleges.



**COMP B43 Web Design: JavaScript**

3 units

Prerequisites: Successful completion of COMP B42 or equivalent with a grade of C or better or instructor assessment of student's knowledge/experience with HTML and CSS.

Description: This is an advanced level course in the web design area. Students will build upon previous knowledge of HTML and CSS to create dynamic and interactive web pages using JavaScript. Not open to students who have previously received credit for COMS B74C.

Hours: 54 lecture

Transferable: CSU and private colleges.

**COMP B48WE Occupational Work Experience Education**

1-8 units

Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.

Description: College credit for Computer Science related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 hours per semester unit of paid work experience; 60 hours per semester unit of volunteer work experience. Repetition allowed per Title 5 55253.

Hours: Non-paid 60 hours for each 1 unit (60-480). Paid 75 hours for each 1 unit (75-600).

Transferable: Not transferable.

**COMP B72 Applied Software Design**

3 units

Prerequisites: Successful completion of COMP B10 and COMP B11 and COMP B21 or equivalent with a grade of C or better or approval of instructor.

Description: The course integrates many aspects of modern end-user computer application design. This includes the SDLC needs assessment, database modeling, SQL, user interface design and the programming that ties these components together. Internal and end-user documentation will also be covered. This course should be taken as the final course for those pursuing the Software Development Certificate of Achievement.

Hours: 54 lecture

Transferable: Not transferable. Pending degree applicability.

**COMP B84 CompTIA A+**

4 units

Recommended: BC placement into reading level 06.

Description: Designed to cover the information and materials needed to enable students to successfully pass the CompTIA A+ examination. Covers the fundamentals of computer technology, installation and configuration of PCs, laptops and related hardware, and basic networking. Includes hardware and software trouble-shooting using various diagnostic tools and methods employed in industry.

Note: Not open to students who have successfully completed COMS B100.

Hours: 54 lecture, 54 lab

Transferable: Not transferable. Pending degree applicability.

**COMP B94 Web Design: PHP & MySQL**

3 units

Prerequisites: Successful completion of COMP B42 or equivalent with a grade of C or better or assessment of student's HTML and CSS skills and knowledge by the instructor.

Recommended: BC placement into reading level 06 and writing level 06.

Description: This is an advanced web design course. Building on a foundation of the HTML coding principles and practice, students in this class will learn to develop server-side solutions using PHP and MySQL as a platform. Not open to students who have previously received credit for COMS B75C.

Hours: 54 lecture

Transferable: Not transferable. Pending degree applicability.

## CRIM - Criminal Justice Courses

**CRIM B1 Introduction to Criminal Justice**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: An overview of the American 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.

Hours: 54 lecture

C-ID: AJ 110/SOCI 160

Transferable: UC, CSU and private colleges; CSU GE D.10; BC GE D.2

**CRIM B2 Criminal Law**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Historical development, philosophy of law and constitutional provisions, definitions, classification of crimes and their application to the criminal justice system, legal research, review of case law, methodology and concepts of law as a social force. Explores crimes against persons, property, and the state as a social, religious, and historical ideology.

Hours: 54 lecture

C-ID: AJ 120

Transferable: UC, CSU and private colleges

**CRIM B3 Introduction to Evidence**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Origin, development, philosophy and constitutional basis of the law of evidence; constitutional and procedural considerations affecting arrest, search and seizure, kinds of degrees of evidence and rules governing admissibility; judicial decisions interpreting individual rights and case studies reviewed from a conceptual level.

Hours: 54 lecture

C-ID: AJ 124

Transferable: CSU and private colleges.

**CRIM B4 Constitutional Criminal Procedure**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Legal processes from pre-arrest, arrest through trial,

sentencing and correctional procedures; a review of the history of case and common law; conceptual interpretations of law as reflected in court decisions; a study of case law methodology and case research as the decisions impact upon the procedures of the justice system.

Hours: 54 lecture

C-ID: AJ 122

Transferable: CSU and private colleges.

### **CRIM B5 Community Relations**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: This course examines the complex, dynamic relationship between communities and the justice system in addressing crime and conflict with an emphasis on the challenges and prospects of administering justice within a diverse multicultural population. The evolving nature of multiculturalism; Multicultural populations; Managing/Policing diverse populations in correctional settings. Topics may include the consensus and conflicting values in Cultural, Religion, and Law.

Hours: 54 lecture

C-ID: AJ 160

Transferable: UC, CSU and private colleges; CSU GE D.10; BC GE D.2

### **CRIM B7 Criminal Profiling of Violent Offenders**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Contemporary issues and controversies associated with criminal profiling.

Hours: 54 lecture

C-ID: AJ 160

Transferable: Pending transferability.

### **CRIM B8 Criminal Investigation**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Fundamentals of criminal investigation; investigator skill requirements; modus operandi determination; the collection, identification and preservation of physical evidence; crime scene investigation; interviews and interrogations; sources of information; surveillance; field note-taking and report writing; courtroom preparation; and the investigation of specific crimes.

Hours: 54 lecture

C-ID: AJ 140

Transferable: CSU and private colleges.

### **CRIM B9 The Juvenile Justice System**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Techniques of handling juvenile offenders and victims; prevention and suppression of delinquency; diagnosis and referral; organization of community resources; juvenile law and juvenile court procedures.

Hours: 54 lecture

C-ID: AJ 220

Transferable: CSU and private colleges.

### **CRIM B10 Organized Crime**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

Transferable: CSU and private colleges.

### **CRIM B12 Forensic and Scientific Aspects of Evidence**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: The examination and evaluation of evidence using scientific principles and procedures for use in a legal setting including forensic (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.

Hours: 54 lecture

C-ID: AJ 150

Transferable: CSU and private colleges.

### **CRIM B21 Introduction to Correctional Administration**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

C-ID: AJ 200

Transferable: CSU and private colleges.

### **CRIM B22 Institutional Treatment and Supervision of Offenders**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

Transferable: CSU and private colleges.

### **CRIM B23 Fundamentals of Interviewing and Counseling**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: A survey of the basic theories and techniques employed in interviewing and counseling by the correctional worker; traces the development of the meaningful relationship between client and caseworker; explores the various types of counseling employed with a correctional relationship, including group counseling.

Hours: 54 lecture

Transferable: CSU and private colleges.

**CRIM B24 Probation, Parole and Community Corrections**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Theory and techniques of probation and parole supervision, including historical development with emphasis on recent programs, research, and development in the field.

Hours: 54 lecture

Transferable: CSU and private colleges.

**CRIM B50 Criminal Justice Report Writing**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Emphasizes the practical aspects of gathering, organizing, and preparing written reports for correctional activities on local, state, and federal levels. Covers techniques of communicating facts, information, and ideas effectively in a simple, clear and logical manner for various types of criminal justice system reports, letters, memos.

Hours: 54 lecture

Transferable: Not transferable. Degree applicable.

**CRIM B60 Legal Aspects of Corrections**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: A survey of legal issues in the corrections environment, the civil rights of prisoners and responsibilities and liabilities of corrections officials. The historical framework, concepts and precedents that guide correctional practice.

Hours: 54 lecture

Transferable: Not transferable. Degree applicable.

**CRPS - Crop Science Courses****CRPS B1 Principles of Crop Production**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Fundamental practices for field, vegetable, tree, and vine crops; basic botany, classification of plants, soils, seeding, 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 Office of Admissions and Records in the Administration building.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges; BC GE B.1

**CRPS B2 Forage Crops**

3 units

Description: Study of important forage crops of California and the nation; species, varieties, adaptations, production methods, feeding qualities, and processing.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

**CRPS B3 Integrated Pest Management**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Fundamental principles of pest control and management in commercial agriculture. Includes pest identification, 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 Office of Admissions and Records in the Administration building. Field trips required.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

**CRPS B4 Vegetable Production**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 36 lecture, 54 lab

Transferable: UC, CSU and private colleges

**CRPS B5 Plant Science**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: This course is designed to provide the students with a working knowledge of the fundamental structures and processes of plants. Principles to be applied cover plant structures, physiology, heredity, environmental relationship to growth, adaptation, and management of crops. Techniques of research, exploration of plant growth, and identification of economical crops will be included.

Hours: 36 lecture, 54 lab

C-ID: AG-PS 104

Transferable: UC, CSU and private colleges; IGETC 5B, 5C; CSU GE B.2, B.3; BC GE B.1

**CRPS B48WE Occupational Work Experience**

1-8 units

Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.

Description: College credit for crop science related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.

Hours: Non-paid 60 hours for each 1 unit (60 - 480). Paid 75 hours for each 1 unit (75 - 600).

Transferable: CSU and private colleges.

**DANC - Dance Courses****DANC B6BLB Beginning Ballet (PHED B6BLB)**

1 unit

Description: Coeducational beginning ballet course, includes proper warm-up exercise, technical skills and terminology.

Hours: 54 lab

Transferable: UC, CSU and private colleges; BC GE E

**DANC B6JD Jazz Dance (PHED B6JD)**

1 unit

Description: 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.

Note: Not open to students who have completed PHED B6JD.

Hours: 54 lab

Transferable: UC, CSU, and private colleges. BC GE E

**ECON - Economics Courses****ECON B1 Principles of Economics-Micro**

3 units

Prerequisites: BC placement into math level 03 or successful completion of MATH B60 or equivalent with a grade of C or better. Recommended: BC placement into reading level 06, writing level 06, and math level 04.

Description: This is an introductory course focusing on choices of individual economic decision-makers. Topics include scarcity, specialization and trade, market equilibrium, elasticity, production and cost theory, market structures, factor markets, and market failure.

Hours: 54 lecture

C-ID: ECON 201

Transferable: UC, CSU and private colleges; IGETC 4.B; CSU GE D.2; BC GE D.2

**ECON B2 Principles of Economics-Macro**

3 units

Prerequisites: BC placement into math level 03 or successful completion of MATH B60 or equivalent with a grade of C or better. Recommended: BC placement into reading level 06, writing level 06, and math level 04.

Description: An introductory course focusing on aggregate economic analysis. Topics include: market systems, aggregate measures of economic activity, macroeconomic equilibrium, money and financial institutions, monetary and fiscal policy, international economics, and economic growth.

Hours: 54 lecture

C-ID: ECON 202

Transferable: UC, CSU and private colleges; IGETC 4.B; CSU GE D.2; BC GE D.2

**EDUC - Education Courses****EDUC B24 Early Field Experience for Elementary Teachers**

3 units

Recommended: BC placement into reading level 06.

Description: This course introduces students to the concepts and issues related to teaching diverse learners in today's contemporary schools, Kindergarten through grade 12 (K-12). Topics include teaching as a profession and career, historical and philosophical foundations of the American education system, contemporary educational issues, California's content standards and frameworks, and teacher performance standards. In addition to class time, the course requires a minimum of 45 hours of

structured fieldwork in public school elementary classrooms that represent California's diverse student population, and includes cooperation with at least one carefully selected and campus-approved certificated classroom teacher.

Hours: 54 lecture

C-ID: EDUC 200

Transferable: UC, CSU and private colleges

**ELET - Electronics Technology Courses****ELET B1 Basic Electronics (DC and AC)**

4 units

Recommended: BC placement into reading level 06.

Description: 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

Hours: 54 lecture, 54 lab

Transferable: CSU and private colleges.

**ELET B4 Computer Integrated Manufacturing**

3 units

Prerequisites: Successful completion of ELET B5 or equivalent with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: 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.

Note: Not open to students who have completed MFGT B4 or MFGT B50.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

**ELET B5 Programmable Logic Controllers**

3 units

Recommended: BC placement into reading level 06.

Description: 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.

Note: Not open to students who have taken the equivalent course, MFGT B5.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

**ELET B6 Analog and Digital Electronics**

3 units

Prerequisites: Successful completion of ELET B1 or equivalent with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: 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).

Note: Not open to students who have taken ELET B9 and ELET B12.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

### **ELET B48WE Occupational Work Experience Education**

1-8 units

Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.

Description: College credit for Electronic Technology related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 hours per semester unit at paid work experience; 60 hours per semester unit volunteer work experience per unit. Repetition allowed per Title 5 55253.

Hours: Non-paid 60 hours for each 1 unit (60-480). Paid 75 hours for each 1 unit (75-600).

Transferable: Not transferable

### **ELET B55A Electric Motors - Controls**

4 units

Prerequisites: Successful completion of ELET B1 with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: 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 (VFDs).

Hours: 54 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

### **ELET B56 Instrumentation and Process Control**

3 units

Prerequisites: Successful completion of ELET B1 or equivalent with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: 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.

Hours: 36 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

### **ELET B58 Advanced Programmable Logic Controllers**

3 units

Prerequisites: Successful completion of ELET B5 with a grade of 'C' or better.

Description: 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 Automations Control Logix platform of PLCs. It will allow students to be involved with either maintenance, or engineering of control 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.

Hours: 36 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

### **ELET B61 Telecommunications**

3 units

Prerequisites: Successful completion of ELET B1 or equivalent with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: Elements of residential and commercial phone systems, electronic communications "basics," transmission line characteristics, fiber-optic cabling and systems, and other non-radio-based communication topics will be covered in this course.

Hours: 36 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

### **ELET B62 Radio Communications**

3 units

Prerequisites: Successful completion of ELET B1 or equivalent with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: Introduction to the basic circuits and systems used for RF communications systems, including microwave and satellite communications, two-way radio systems, AM, FM, NBFM, and SSB modulation, antenna systems, and transmission lines.

Hours: 36 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

### **ELET B63 Electronic Systems Installation**

3 units

Prerequisites: Successful completion of ELET B1 or equivalent with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: 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

Hours: 36 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

### **ELET B70 Mechanical Systems**

3 units

Recommended: BC placement into reading level 06.

Description: Introduction to machinery and machining processes, essential elements of mechanical systems, mechanical drives (gears, belts and pulleys, clutches), mechanical hardware, bushings, bearings, lubrication systems, basic properties of materials, hydraulics and pneumatics, preventive maintenance, basic hand and power tools, and basic precision dimensional measurement.

Hours: 36 lecture, 54 lab

Transferable: Not transferable. Degree applicable.

# EMLS - English for Multilingual Students

## **EMLS B50 Introduction to College Composition**

4 units

Prerequisites: BC placement into writing level 05 or successful completion of EMLS B60 or equivalent with a grade of C or better.

Description: Recommended for international and multilingual students who need to develop their skills in composition and persuasion as well as comprehension and analysis of reading. Stresses both organization and in-depth essay development as well as critical thinking. Prepares students for ENGL B1A.

Note: Not open to students who have completed ENSL B50 or ENSL B1.

Hours: 72 lecture

Transferable: Not transferable. Not degree applicable.

## **EMLS B50NC Introduction to College Composition**

0 units

Prerequisites: BC placement into writing level 05 or successful completion of EMLS B60 or equivalent with a grade of C or better.

Description: Recommended for international and multilingual students who need to develop their skills in composition and persuasion as well as comprehension and analysis of reading. Stresses both organization and in-depth essay development as well as critical thinking. Prepares students for ENGL B1A. Note: Not open to students who have completed ENSL B50, EMLS B50, or ENSL B1.

Hours: 72 lecture

Repeatable: 3

Transferable: Not transferable. Not degree applicable.

## **EMLS B51 Advanced Reading**

3 units

Prerequisites: BC placement into reading level 05 or successful completion of EMLS B61 or equivalent with a grade of C or better.

Description: Recommended for international and multilingual students who need to improve reading comprehension and build vocabulary in English. Emphasis is on identifying main ideas, summarizing, inferring, analyzing, drawing comparisons, and developing more advanced vocabulary by reading complex academic and literary texts. Prepares students for college level reading.

Note: Not open to students who have completed ENSL B52.

Hours: 54 lecture

Transferable: Not transferable. Not degree applicable.

## **EMLS B52 Advanced Communication Skills**

3 units

Prerequisites: BC placement into reading 05 or successful completion of EMLS B62 or equivalent with a grade of C or better.

Description: Recommended for international and multilingual students who need prescriptive training in pronunciation, stress and intonation in spontaneous speech. Development of oral communication skills through formal presentations and debates. Analysis of lectures, arguments, and academic discussions.

Note: Not open to students who have completed ENSL B22.

Hours: 54 lecture

Transferable: Not transferable. Not degree applicable.

## **EMLS B52NC Advanced Communication Skills**

0 units

Prerequisites: BC placement into reading 05 or successful

completion of EMLS B62 or EMLS B62NC or equivalent with a grade of C or better.

Description: Recommended for international and multilingual students who need prescriptive training in pronunciation, stress and intonation in spontaneous speech. Development of oral communication skills through formal presentations and debates. Analysis of lectures, arguments, and academic discussions.

Note: Not open to students who have completed ENSL B22 or EMLS B52.

Hours: 54 lecture

Repeatable: 3

Transferable: Not transferable. Not degree applicable.

## **EMLS B60 Basic Skills Writing**

4 units

Prerequisites: BC placement into writing level 04 or successful completion of EMLS B70 or equivalent with a grade of C or better.

Description: Recommended for international and 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 EMLS B50 or ENGL B50.

Note: Not open to students who have completed ENSL B60.

Hours: 72 lecture

Transferable: Not transferable. Not degree applicable.

## **EMLS B61 Intermediate Reading**

4 units

Prerequisites: BC placement into reading level 04 or successful completion of EMLS B71 or equivalent with a grade of C or better.

Description: Recommended for international and multilingual 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 EMLS B71.

Note: Not open to students who have completed ENSL B51 or ACDV B61 or ACDV B62.

Hours: 72 lecture

Transferable: Not transferable. Not degree applicable.

## **EMLS B61NC Intermediate Reading**

0 units

Prerequisites: BC placement into reading level 04 or successful completion of EMLS B71 or ENSL B61 or equivalent with a grade of C or better.

Description: Recommended for international and multilingual 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 EMLS B71.

Note: Note: Not open to students who have completed ENSL B51 or EMLS B61.

Hours: 72 lecture

Repeatable: 3

Transferable: Not transferable. Not degree applicable.

## **EMLS B62 Intermediate Communication Skills**

3 units

Prerequisites: BC placement into reading level 04 or successful completion of EMLS B72 or equivalent with a grade of C or better.

Description: Recommended for international and multilingual students who need communication and pronunciation skills.

Emphasis is on critical listening skills, oral presentations, class discussions, and pronunciation practice.

Note: Not open to students who have completed ENSL B21.

Hours: 54 lecture

Transferable: Not transferable. Not degree applicable.

### **EMLS B62NC Intermediate Communication Skills**

0 units

Prerequisites: BC placement into reading level 04 or successful completion of EMLS B72 or ENSL B71CD or equivalent with a grade of C or better.

Description: Recommended for international and multilingual students who need communication and pronunciation skills.

Emphasis is on critical listening skills, oral presentations, class discussions, and pronunciation practice. Note: Not open to students who have completed ENSL B21 or EMLS B62.

Hours: 54 lecture

Repeatable: 3

Transferable: Not transferable. Not degree applicable.

### **EMLS B70 Grammar and Composition**

4 units

Prerequisites: BC placement into writing level 03.

Description: Recommended for international and multilingual 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 EMLS B60.

Note: Not open to students who have completed ENSL B70 or ENSL B3.

Hours: 72 lecture

Transferable: Not transferable. Not degree applicable.

### **EMLS B70NC Grammar and Composition**

0 units

Prerequisites: BC placement into writing level 03.

Recommended for multilingual 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 EMLS B60.

Note: Not open to students who have completed ENSL B70, EMLS B70, or ENSL B3.

Hours: 72 lecture

Repeatable: 3

Transferable: Not transferable. Not degree applicable.

### **EMLS B71 Basic Reading**

4 units

Prerequisites: BC placement into writing level 03.

Description: Recommended for international and multilingual students who need to improve reading comprehension and build their vocabulary in English. Emphasis is on identifying main ideas, summarizing, making inferences, developing vocabulary, and using academic language.

Note: Not open to students who have completed ENSL B61.

Hours: 72 lecture

Transferable: Not transferable. Not degree applicable.

### **EMLS B71NC Basic Reading**

0 units

Prerequisites: BC placement into writing level 03.

Recommended for multilingual students who need to improve reading comprehension and build their vocabulary in English.

Emphasis is on identifying main ideas, summarizing, making inferences, developing vocabulary, and using academic language.

Note: Not open to students who have completed ENSL B61 or EMLS B71.

Hours: 72 lecture

Repeatable: 3

Transferable: Not transferable. Not degree applicable.

### **EMLS B72 Basic Communication Skills**

4 units

Prerequisites: BC placement into reading level 03 or see a counselor.

Description: Recommended for international and multilingual students who need to improve their listening and speaking skills in small groups as well as in larger settings. The focus is on improving pronunciation, intonation, rhythm, and stress patterns as well as listening comprehension in small group settings and classroom lectures.

Note: Not open to students who have completed ENSL B71CD.

Hours: 72 lecture

Transferable: Not transferable. Not degree applicable.

### **EMLS B72NC Basic Communication Skills**

0 units

Prerequisites: BC placement into reading level 03 or see a counselor.

Recommended for multilingual students who need to improve their listening and speaking skills in small groups as well as in larger settings. The focus is on improving pronunciation, intonation, rhythm, and stress patterns as well as listening comprehension in small group settings and classroom lectures.

Note: Not open to students who have completed ENSL B71CD or EMLS B72.

Hours: 72 lecture

Repeatable: 3

Transferable: Not transferable. Not degree applicable.

## **EMTC - Emergency Medical Technician Courses**

### **EMTC B10 Paramedic 1**

6 units

Prerequisites: Limitation on enrollment, acceptance into the Paramedic Program.

Corequisite: EMTC B11

Description: This course introduces the student to the roles and responsibilities of the Paramedic within the Emergency Medical System. The student will be expected to apply basic concepts of anatomy, pathophysiology, pharmacology, patient assessment, the health and safety of the paramedic, documentation, and medical legal issues to be able to formulate a 'field impression' of patient status.

Hours: 108 lecture

Transferable: CSU and private colleges.

### **EMTC B11 Paramedic Skills Lab 1**

1 unit

Prerequisites: Limitation on enrollment, acceptance into the Paramedic Program and possess a high school diploma or general education equivalent and possess a current EMT certificate or NREMT-Basic registration or possess a current AEMT

certificate in the State of California or be currently registered as an EMT-Intermediate with the NREMT and possess a current basic cardiac life support (CPR) card equivalent to the current American Heart Association's Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care at the healthcare provider level.

Corequisite: EMTC B10

Description: The focus of this skills lab course is to allow the student hands-on practice as well as to test for competency in patient assessment, medication administration, airway management, and cardiology. The topics taught in this course will be coordinated to align with the weekly lessons taught during lecture in order to meet the performance objectives of the program. This lab course is hosted in a simulation lab and is the corequisite for EMTC B10 and EMTC B12.

Hours: 54 lab

Transferable: CSU and private colleges.

### **EMTC B12 Paramedic 2**

6 units

Prerequisites: Limitation on enrollment, acceptance into the Paramedic Program.

Corequisite: EMTC B11

Description: This course includes the foundational material necessary to assess and manage patients in need of prehospital advanced life support at the paramedic level. Topics include: Prehospital Pharmacology, Cardiology, and Airway Management.

Hours: 108 lecture

Transferable: CSU and private colleges.

### **EMTC B13 Paramedic 3**

6 units

Prerequisites: Limitation on enrollment, acceptance into the Paramedic Program and successful completion of EMTC B10, EMTC B11, and EMTC B12 with a minimum GPA of 80%.

Corequisite: EMTC B14

Description: This course builds upon previous paramedic content and introduces the basic concepts of gastroenterology, genitourinary, hematology, non-traumatic musculoskeletal conditions, toxicology, psychology, medical ailments of the head, eyes, ears, nose, and throat, pulmonology, endocrinology immunology, neurology, and communicable diseases.

Hours: 108 lecture

Transferable: CSU and private colleges.

### **EMTC B14 Paramedic Skills Lab 2**

1 unit

Prerequisites: Limitation on enrollment, acceptance into the Paramedic Program.

Corequisite: EMTC B13

Description: The focus of this course is to build upon the knowledge gained in the first semester paramedic classes and to prepare the student for real hands-on experience in the clinical setting. This course tests for competency in patient assessment, medication administration, airway management, cardiology, medical emergencies and traumas. The topics taught in this course will be coordinated to align with the weekly lessons taught during lecture in order to meet the performance objectives of the program.

Hours: 54 lab

Transferable: CSU and private colleges.

### **EMTC B15 Paramedic 4**

6 units

Prerequisites: Limitation on enrollment, acceptance into the Paramedic Program.

Corequisite: EMTC B14

Description: This course builds upon the content from the first semester paramedic courses and introduces the basic concepts of shock, traumas/burns, environmental emergencies, geriatrics, abuse, home health/special needs, ambulance operations, and weapons of mass destruction, Hazmat, bio terrorism, and the incident command system.

Hours: 108 lecture

Transferable: CSU and private colleges.

### **EMTC B16 Paramedic Clinical Lab**

3.5 units

Prerequisites: Limitation on enrollment: acceptance into the Paramedic Program and EMTC B15 successful completion (within 6 months) of paramedic didactic courses with an 80% or higher GPA.

Description: This course involves clinical experience in the hospital setting enabling the paramedic student to utilize theory and practice learned during the didactic phase. The clinical rotation puts an emphasis on patient assessments and utilization of paramedic skills in the hospital setting under the direct supervision of an RN and/or MD as the clinical preceptor.

Materials Fee: \$24.00

Hours: 189 lab

Transferable: CSU and private colleges.

### **EMTC B17 Paramedic Field Internship**

10 units

Prerequisite: Limitation on Enrollment, Acceptance into the Paramedic Program. Successful completion of EMTC B16 with a grade of C or better and successful completion (within 3 months) of EMTC B30 with an 80% or higher GPA.

Description: This is the final course of the paramedic program. Field training is performed in a 911 system on an advanced life support ambulance under the direct supervision of a qualified paramedic preceptor. Field training continues the refinement of learned skills. It also advances student understanding by introducing them to a wide variety of prehospital emergencies in the form of on the job training.

Materials Fee: \$24.00

Hours: 540 lab

Transferable: CSU and private colleges.

### **EMTC B50 Emergency Medical Technician-1**

8 units

Prerequisites: Prerequisites: Limitation on Enrollment, Student must be 18 years of age by the completion date of the course. Mandatory physical examination/immunizations and fit testing must be completed 2 weeks after the 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. Students must have a copy of a current BLS (American Heart Association Health Care Provider) card. Recommended: Successful completion of MEDS B60 with a grade of 'C' or better.

Description: Provides foundational skills and assessment techniques to care for an ill or injured person in the pre-hospital setting. Closely follows state regulations for EMT-1 training and leads to certification at the local, county, and state level. Required for all ambulance personnel and appropriate for



many other first responders such as law enforcement and fire personnel. The student must meet health requirements to participate in the lab section of the course. Any expenses involved in meeting the health requirements are the student's expense. Mandatory physical examination/immunizations will be required within 2 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.

Materials Fee: \$24.00

Hours: 135 lecture, 27 lab

Transferable: Not transferable. Degree applicable.

### **EMTC B50R Emergency Medical Technician I Recertification Preparation**

1 unit

Prerequisites: Must possess current EMT-1 certification or certification that has expired in less than one year.

Description: A review of material in EMTC B50 with updates on EMT-1 issues and new material or skill techniques. An approved refresher course that follows state regulations and leads to a recertification completion certificate. Required to continue practice of pre-hospital emergency care.

Materials Fee: \$24.00

Hours: 24 lecture

Repeat: Legally Mandated Training

Transferable: Not transferable. Degree applicable.

### **EMTC B51 Emergency Medical Responder**

3 units

Description: This course is designed to train fire service personnel to render pre-hospital basic life support care under field emergency conditions. The CDCR FIRE EMR course complies with the National EMS Education standards for Emergency Medical Responder. This course has been approved by the California EMS Authority.

Hours: 54 lecture

Transferable: Not transferable. Degree applicable.

## **ENGL - English Courses**

### **ENGL B1A Expository Composition**

3 units

Prerequisites: BC placement into writing level 06 or successful completion of ENGL B50 or ENGL B53 or equivalent with a grade of C or better.

Description: Critical reading, writing, and thinking. Students will critically read and write primarily expository and argumentative texts that respond to a variety of rhetorical situations and contexts and incorporate college-level research. Minimum 6,000 words formal writing.

Hours: 54 lecture

C-ID: ENGL 100

Transferable: UC, CSU and private colleges; IGETC 1.A; CSU GE A.2; BC GE A.2

### **ENGL B1B Introduction to Types of Literature**

3 units

Prerequisites: Successful completion of ENGL B1A or equivalent with a grade of C or better.

Description: 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.

Hours: 54 lecture

C-ID: ENGL 120

Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE A.3; CSU GE C.2; BC GE C.2

### **ENGL B2 Advanced Composition and Critical Thinking**

4 units

Prerequisites: Successful completion of ENGL B1A or equivalent with a grade of C or better.

Description: 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.

Hours: 72 lecture

C-ID: ENGL 105

Transferable: UC, CSU and private colleges; IGETC 1.B; CSU GE A.3; BC GE A.2

### **ENGL B3 Argumentative Writing and Critical Thinking Through Literature**

4 units

Prerequisites: Successful completion of ENGL B1A with a grade of C or better.

Description: This course offers instruction in argumentative, critical, and analytical writing, critical thinking, research strategies, information literacy, and proper documentation through the study of literary works from major genres, while developing students' close reading skills and promoting an appreciation for the aesthetic qualities of literature.

Hours: 72

C-ID: ENGL 110

Transferable: UC, CSU and private colleges; IGETC 1.B; CSU GE A.3; BC GE A.2

### **ENGL B5A Survey of English Literature**

3 units

Prerequisites: BC placement into writing level 06 or successful completion of ENGL B50 or equivalent with a grade of C or better. Recommended: Successful completion of ENGL B1B with a grade of C or better.

Description: 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.

Hours: 54 lecture

C-ID: ENGL 160

Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

### **ENGL B5B Survey of English Literature**

3 units

Prerequisites: BC placement into writing level 06 or successful completion of ENGL B50 or equivalent with a grade of C or better. Recommended: Successful completion of ENGL B1A with a grade of C or better.

Description: A historical survey of English literature, emphasizing critical reading of representative works from 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.

Hours: 54 lecture

C-ID: ENGL 165

Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

### **ENGL B10 Introduction to Shakespeare**

3 units

Prerequisites: Successful completion of ENGL B1A or equivalent with a grade of C or better.

Description: Study of the drama and sonnets of William Shakespeare. Recommended as an elective for majors in the humanities, history, or education. Historical information pertaining to Shakespeare and Elizabethan England will also be covered to increase students' appreciation of the Bard's accomplishments. Classroom discussions, oral presentations, and performance footage will provide further examples of the ongoing relevance of Shakespeare's work today.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

### **ENGL B20A Survey of World Literature**

3 units

Prerequisites: BC placement into writing level 06 or successful completion of ENGL B50 or equivalent with a grade of C or better.

Recommended: Successful completion of ENGL B1A with a grade of C or better.

Description: 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.

Hours: 54 lecture

C-ID: ENGL 140

Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

### **ENGL B21 African-American Literature**

3 units

Prerequisites: BC placement into writing level 06 or successful completion of ENGL B50 or equivalent with a grade of C or better.

Recommended: Successful completion of ENGL B1A with a grade of C or better.

Description: A historical survey of major authors, works, genres, themes, and movements in African-American literature in America from colonial times to the present.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

### **ENGL B24 Latino/a Literature**

3 units

Prerequisites: BC placement into reading level 06 or successful completion of ENGL B50 or ACDV B50 or ACDV B61 or equivalent with a grade of C or better.

Description: This course will study works written by Latinas/os in the United States and Latin America in order to discover the ways in which these works have interacted with specific cultures and contexts, from colonialism to the present.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

### **ENGL B25B Survey of World Literature**

3 units

Prerequisites: BC placement into writing level 06 or successful completion of ENGL B50 or equivalent with a grade of C or better. Recommended: Successful completion of ENGL B1A with a grade of C or better.

Description: 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 approximately 1650 to present. Not open to students who have completed ENGL B20B.

Hours: 54 lecture

Transferable: Pending transferability.

### **ENGL B27 The Bible as Literature**

3 units

Prerequisites: BC placement into writing level 06 or successful completion of ENGL B50 or equivalent with a grade of C or better. Recommended: Successful completion of ENGL B1A with a grade of C or better.

Description: Interpretation and analysis of Old and New Testament genres: Narrative, poetry, drama, epistles, didactics, wisdom, and prophecy.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

### **ENGL B28 Classical Mythology**

3 units

Prerequisites: BC placement into writing level 06 or successful completion of ENGL B50 or equivalent with a grade of C or better. Recommended: Successful completion of ENGL B1A with a grade of C or better.

Description: A study of classical myth, saga, and local legend, primarily Greek and Roman. Relates classical myths to historical and modern culture.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

### **ENGL B30A Survey of American Literature**

3 units

Prerequisites: BC placement into level 06 or successful completion of ENGL B50 or equivalent with a grade of C or better. Recommended: Successful completion of ENGL B1A with a grade of C or better.

Description: 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.

Hours: 54 lecture

C-ID: ENGL 130

Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

### **ENGL B30B Survey of American Literature**

3 units

Prerequisites: BC placement into level 06 or successful completion of ENGL B50 or equivalent with a grade of C or better. Recommended: Successful completion of ENGL B1A with a grade of C or better.

Description: Study of the most notable American authors from the second half of the 19th century to the present with emphasis on the intrinsic value of the literature.

Hours: 54 lecture

C-ID: ENGL 135

Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

### **ENGL B33 Children's Literature**

3 units

Prerequisites: BC placement into writing level 06 or successful completion of ENGL B50, ENGL B53 or equivalent with a grade of C or better.

Description: This course introduces major works and develops students' reading and analytical writing skills while promoting an appreciation for the aesthetics, history, authors, genres, and themes of children's literature. Readings will include folklore, oral tradition, contemporary stories, illustrated books, poetry, and juvenile novels from a variety of cultures and critical perspectives.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B, CSU GE C.2, BC GE C.2

### **ENGL B41A Introduction to Creative Writing**

3 units

Prerequisites: BC placement into writing level 06 or successful completion of ENGL B50 or equivalent with a grade of C or better. Recommended: Successful completion of ENGL B1A with a grade of C or better.

Description: Introduction to the craft of creative writing of poetry, fiction, and other genres. Students will read, discuss, and analyze various literary works, and will produce and revise their own works. In addition, they will give and receive constructive criticism in a workshop environment.

Hours: 54 lecture

C-ID: ENGL 200

Transferable: CSU and private colleges.

### **ENGL B50 Introduction to College Composition**

4 units

Prerequisites: BC placement into writing level 05 or successful completion of ENGL B60 or equivalent with a grade of C or better.

Description: Emphasizes the writing of expository and argumentative essays and the comprehension and analysis of readings. Prepares transfer students for English B1A.

Hours: 72 lecture

Transferable: Not transferable. Not degree applicable.

### **ENGL B53 Reading, Reasoning, and Writing**

4 units

Prerequisites: BC placement into writing level 04 or successful completion of ACDV B80 or equivalent with a grade of C or better.

Description: Emphasizes developing arguments and strengthening critical thinking, organizing, and reading and writing skills relevant to college work through a thematic approach. Prepares students for English B1A.

Note: For courses that list ENGL B50 as a prerequisite, either ENGL B50 or ENGL B53 with a grade of 'C' or better may be used.

Hours: 72 lecture

Transferable: Not transferable. Not degree applicable.

### **ENGL B60 Basic Writing Skills**

4 units

Prerequisites: BC placement into writing level 04 or successful completion of ACDV B80 or equivalent with a grade of C or better.

Description: Review and application of fundamentals of standard English. Emphasizes sentence, paragraph, and short essay writing.

Hours: 72 lecture

Transferable: Not transferable. Not degree applicable.

### **ENGL B100 Technical Writing**

3 units

Prerequisites: Admissions to the Bachelor of Science, Industrial Automation Program

Description: Study of the process of technical writing and written communication. Students review various formats and writing purposes and produce technical and business-related documents.

Hours: 54 lecture

Transferable: Bachelor's Degree Applicable

## **ENGR - Engineering Courses**

### **ENGR B17 Introduction to Electrical Circuits**

3 units

Prerequisites: Successful completion of PHYS B4B or equivalent with a grade of C or better.

Corequisite: Math B6D with a grade of 'C' or better, or may be taken concurrently.

Description: Principles and techniques of D.C. and A.C. circuit analysis, including Kirchhoff's laws, mesh and nodal analysis, Thevenin's and Norton's theorems, impedance, phasors, frequency response, power calculations, natural and forced responses, analog building blocks, operational amplifiers, and Laplace transforms.

Hours: 54 lecture

Transferable: UC, CSU and private colleges

### **ENGR B17L Electric Circuit Lab**

1 unit

Prerequisites: Successful completion of ENGR B17 or equivalent with a grade of C or better or may be taken concurrently.

Description: An introduction to the construction and measurement of electrical circuits. Basic use of electrical test and measurement instruments including multimeters, oscilloscopes, power supplies, and function generators. Use of circuit simulation software. Interpretation of measured and simulated data based on principles of circuit analysis for DC, transient, and sinusoidal steady-state (AC) conditions. Elementary circuit design. Practical considerations such as component value tolerance and non-ideal aspects of lab instruments. Construction and measurement of basic operational amplifier circuits.

Hours: 54 lab

Transferable: UC, CSU and private colleges

### **ENGR B19C Introduction to Programming Concepts and Methodologies for Engineers**

3 units

Prerequisites: Successful completion of MATH B1B or equivalent with a grade of C or better.

Description: The purpose of this course is expose students to (1) the fundamental concepts of procedure oriented programming, (2) associated abstraction mechanisms and design processes, (3) the interface of software with the physical world (e.g., the use of sensors), and (4) the application of programming concepts to numerical analysis techniques. This course utilizes the C/C++ programming language.

Hours: 36 lecture, 54 lab

Transferable: UC, CSU and private colleges

### **ENGR B20 Programming and Problem-Solving in MATLAB**

3 units

Prerequisites: Successful completion of MATH B6A with a grade of C or better.

Description: This course utilizes the MATLAB environment to provide students with a working knowledge of computer-based problem-solving methods relevant to science and engineering. It introduces the fundamentals of procedural and object oriented programming, numerical analysis, and data structures. Examples and assignments in the course are drawn from practical applications in engineering, physics, and mathematics.

Hours: 36 lecture, 54 lab

Transferable: CSU transferable, Associate Degree.

### **ENGR B24 Engineering Graphics and Descriptive Geometry**

3 units

Prerequisites: Successful completion of MATH B1B with a grade of C or better.

Description: This course covers the principles of engineering drawings in visually communicating engineering designs and an introduction to computer-aided design (CAD). Topics include the development of visualization skills; orthographic projections; mechanical dimensioning and tolerancing practices; and the engineering design process. Assignments develop sketching and 2-D and 3-D CAD skills. The use of CAD software is an integral part of the course.

Hours: 36 lecture, 54 lab

Transferable: UC, CSU and private colleges

### **ENGR B36 Engineering Mechanics-Statics**

3 units

Prerequisites: Successful completion of MATH B6B and PHYS B4A or equivalent with a grade of C or better.

Description: A first course in engineering mechanics: properties of forces, moments, couples and resultants; two- and three-dimensional force systems acting on engineering structures in equilibrium; analysis of trusses, and beams; distributed forces, shear and bending moment diagrams, center of gravity, centroids, friction, and area and mass moments of inertia.

Hours: 54 lecture

Transferable: UC, CSU and private colleges

### **ENGR B37 Engineering Mechanics-Dynamics**

3 units

Prerequisites: Successful completion of ENGR B36 or equivalent with a grade of C or better.

Description: 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.

Hours: 54 lecture

C-ID: ENGR 230

Transferable: UC, CSU and private colleges

### **ENGR B40 Surveying**

3 units

Prerequisites: Successful completion of MATH B1B or equivalent with a grade of C or better.

Description: The course applies theory and principles of plane surveying: office computations and design; operation of surveying field equipment; and production of engineering

plans/maps. Topics include distances, angles, and directions; differential leveling; traversing; property/boundary surveys; topographic surveys/mapping; volume/earthwork; horizontal and vertical curves; land description techniques; and GPS. Extensive field work using tapes, levels, transits, theodolites, total stations, and GPS.

Hours: 36 lecture, 54 lab

Transferable: UC, CSU and private colleges

### **ENGR B45 Properties of Materials**

4 units

Prerequisites: Successful completion of CHEM B1A and PHYS B4A or equivalent with a grade of C or better.

Description: Internal structure of engineering materials.

Characteristics of single and multiple phase metals; polymers, ceramics and composite materials. Mechanical, thermal, chemical and electrical behavior of engineering materials. Lab investigation of the physical properties of metals, wood, soils, concrete, and polymers.

Hours: 54 lecture, 54 lab

Transferable: UC, CSU and private colleges

### **ENGR B47 Introduction to Engineering and Design**

2 units

Description: Introduction to the engineering profession and the engineering design process. Explores the branches of engineering, the functions of an engineer, and the industries in which engineers work. Explains the engineering education pathways and explores the effective strategies for students to reach their full academic potential. Presents an introduction to the methods and tools of engineering problem solving and design including the interface of the engineer with society and engineering ethics. Develops communication skills pertinent to the engineering profession.

C-ID: ENGR 110

Hours: 18 lecture, 54 lab

Transferable: UC, CSU and private colleges

## **ERSC - Earth Science Courses**

### **ERSC B10 Introduction to Earth Science**

3 units

Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.

Description: Introduction to the fundamentals of Earth Science, including the solid Earth, atmosphere, hydrosphere, and Earth's place in the universe. Investigations include interactions between Earth's systems including the rock cycle, plate tectonic cycle, weathering cycle, hydrologic cycle, and global climate. Two Saturday field trips are optional.

Hours: 54 lecture

C-ID: GEOL 120

Transferable: UC, CSU and private colleges; IGETC 5.A; CSU GE B.1; BC GE B.1

### **ERSC B10L Earth Science Lab**

1 unit

Prerequisites: Successful completion of ERSC B10 or equivalent with a grade of C or better or may be taken concurrently.

Description: Earth Science lab exercises are designed to enhance lecture topics from Earth Science 10. Lab work will include the

identification of rocks and minerals, the rock cycle, weather systems and the effect of weather on landforms, ocean systems and the solar system.

Note: This lab course can be taken subsequent to or concurrently with the lecture, ERSC B10.

Hours: 54 lab

C-ID: GEOL 120L

Transferable: UC, CSU and private colleges; IGETC 5.C; CSU GE B.3; BC GE B.1

## FDSV - Food Service Courses

### FDSV B48WE Occupational Work Experience Education

1-8 units

Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.

Description: College credit for food service related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.

Hours: Non-paid 60 hours for each 1 unit (60 - 480). Paid 75 hours for each 1 unit (75 - 600).

Transferable: CSU and private colleges.

### FDSV B50 Introduction to the Foodservice Industry

2 units

Recommended: BC placement into reading level 06.

Description: An introduction to the foodservice industry including history, trends, organization and job opportunities. Entry skills to be taught include communication techniques, terminology, work simplification, application of computational skills, safety procedures, time management, equipment identification and operation, and knife skills and cutting techniques. Provides career and educational planning. Satisfies the 0.5 unit counseling requirement for graduation from Bakersfield College. Field trips required.

Hours: 36 lecture

Transferable: Not transferable. Degree applicable.

### FDSV B51 Food and Nutrition Orientation

0.5 unit

Recommended: BC placement into reading level 06.

Description: 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 in this course.

Hours: 9 lecture

Transferable: Not transferable. Degree applicable.

### FDSV B52 Foodservice Sanitation and Safety

2 units

Recommended: BC placement into reading level 06.

Description: 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 inspection including HACCP system are emphasized. Course meets minimum food safety certification requirements of California legislation effective January 1, 2000. Upon passing the required exam, course certificate of completion is awarded from the Education Foundation of the National Restaurant Association. Field trips may be required.

Hours: 36 lecture

Transferable: Not transferable. Degree applicable.

### FDSV B55A Food Service Production Theory I

2.5 units

Description: Basic principles and techniques involved in commercial and non-commercial food production. Emphasizes recipe standardization, equipment and sanitation and safety principles. Cookery principles relating to stocks, sauces, soups, meats, vegetables, salads, potatoes, and starches. Field trips may be required.

Hours: 45 lecture

Transferable: Not transferable. Degree applicable.

### FDSV B55B Food Service Production Theory II

2.5 units

Description: 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. Field trips may be required.

Hours: 45 lecture

Transferable: Not transferable. Degree applicable.

### FDSV B55C Food Service Production Lab I

2 units

Prerequisites: Successful completion of FDSV B50 and FDSV B55A or FDSV B55B may be taken concurrently with a grade of C or better.

Description: Practical experiences in the preparation of foods typical to a dinner house/a la 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. Field trips may be required.

Hours: 108 lab

Transferable: Not transferable. Degree applicable.

### FDSV B55D Food Service Production Lab II

2 units

Prerequisites: Successful completion of FDSV B50 and FDSV B55A or FDSV B55B may be taken concurrently with grades of C or better.

Description: 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. Field trips may be required.

Hours: 108 lab

Transferable: Not transferable. Degree applicable.

**FDSV B55E Advanced Food Service Practicum**

3 units

Prerequisites: Successful completion of FDSV B52, B55A, B55B, B55C, and B55D with a grade of C or better.

Description: Practicum application of acquired knowledge, skills, work ethics, and technology in developing a broader understanding of production, service and management function in on-campus and off-campus foodservice operations. Uniforms are required. Transportation provided by the student. Practicum sites must be approved by their instructor.

Hours: 18 lecture, 108 lab

Transferable: Not transferable. Degree applicable.

**FDSV B55F Fundamentals of Baking**

2 units

Prerequisites: Successful completion of FDSV B50 with a grade of C or better.

Description: Fundamental baking experience in the production of cakes, basic creams, icings, dessert sauces, tarts, eclairs, meringues, cookies, yeast breads, quick breads and specialty cookies. Decorative work and display pieces, product presentation and marketing techniques demonstrated.

Hours: 108 lab

Transferable: Not transferable. Degree applicable.

**FDSV B55I Food and Nutrition Internship**

2 units

Prerequisites: Successful completion of FDSV B52 and B55A and B55B and B55C and B55D with a grade of C or better.

Description: 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 food service professional. Practicum sites must be approved by the instructor. Course emphasizes integrating theory with practical food service applications. Participation criteria may vary among the participating food service professional organizations. Uniform is required. Transportation provided by the student.

Hours: 18 lecture, 54 activity

Transferable: Not transferable. Degree applicable.

**FDSV B59 Food Service Production Management**

3 units

Prerequisites: FDSV B50 and FDSV B52 (or may be taken concurrently) and FDSV B55A (or may be taken concurrently) or FDSV B55B (or may be taken concurrently) with grades of 'C' or better.

Description: 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 foodservice 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. Field trips may be required.

Hours: 54 lecture

Transferable: Not transferable. Degree applicable.

**FIRE - Fire Technology Courses****FIRE B1 Fire Protection Organization**

3 units

Description: 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. Field trips required.

Hours: 54 lecture

Transferable: CSU and private colleges.

**FIRE B2 Principles of Fire and Emergency Services Safety and Survival**

3 units

Description: This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services.

Hours: 54 lecture

Transferable: CSU and private colleges. Degree applicable.

**FIRE B3 Fire Command, Strategy, & Tactics**

3 units

Description: This course will cover fire department organization, management, resources, and the use of those resources to control various types of emergencies. The course will also cover the incident command system, tactics, and strategies. This course also provides an introduction to the national incident management system.

Hours: 54 lecture

Transferable: CSU and private colleges. Degree applicable.

**FIRE B4 Fire Behavior and Combustion**

3 units

Description: Theory and fundamentals of how and why fires start, spread and are controlled; an in-depth study of fire chemistry and physics, fire burning characteristics of materials, extinguishing agents, and fire control techniques.

Hours: 54 lecture

Transferable: CSU and private colleges. Degree applicable.

**FIRE B5 Fire Prevention**

3 units

Description: 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.

Hours: 54 lecture

Transferable: CSU and private colleges. Degree applicable.

**FIRE B6 Fire Protection Equipment and Systems**

3 units

Description: This course 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.

Hours: 54 lecture

Transferable: CSU and private colleges. Degree applicable.

### **FIRE B7 Building Construction for Fire Protection**

3 units

Description: 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.

Hours: 54 lecture

Transferable: CSU and private colleges. Degree applicable.

### **FIRE B25A Wildland Fire Behavior**

3 units

Description: 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 lecture

Transferable: CSU and private colleges.

### **FIRE B25B Wildland Firefighter Safety and Survival**

3 units

Description: Study of factors that lead to unsafe working conditions in wildland firefighting and procedures to limit risk. Emphasis is placed on avoiding situations and conditions which have resulted in the 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 lecture

Transferable: CSU and private colleges.

### **FIRE B25C Wildland Fire Operations**

3 units

Description: Presents the command structure and operational process of 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 lecture

Transferable: CSU and private colleges.

### **FIRE B25D Wildland Public Information Officer, Prevention, and Investigation**

3 units

Description: 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 lecture

Transferable: CSU and private colleges.

### **FIRE B25E Wildland Fire Logistics, Finance, and Planning**

3 units

Description: 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 lecture

Transferable: CSU and private colleges.

### **FIRE B26A S-200 Initial Attack Incident Commander (ICT 4)**

1 unit

Description: 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: 18 lecture

Transferable: CSU and private colleges.

### **FIRE B26D Interagency Incident Business Management S-260**

1 unit

Description: 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: 18 lecture

Transferable: CSU and private colleges.

### **FIRE B26E S-215 Fire Operations in the Wildland/Urban Interface**

1.5 units

Description: 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: 27 lecture

Transferable: CSU and private colleges.

### **FIRE B26G S-230 Crew Boss Single Resource**

1.5 units

Description: This is a classroom course designed to produce student proficiency in the performance of duties associated with the single resource boss position from initial dispatch through demobilization to the home unit. Topics include operational leadership, preparation and mobilization, assignment preparation, risk management, entrapment avoidance, safety and tactics, offline duties, demobilization, and post-incident responsibilities.

Hours: 27 lecture

Transferable: CSU and private colleges.

### **FIRE B26K S-244 Field Observer**

1.5 units

Description: This course provides the student with the skills necessary to perform as a field observer (FOBS) and/or a fire

effects monitor (FEMO). Topics include roles and responsibilities of the FOBS and FEMO; how to make observations and document those observations; how to produce hand drawn and GPS field maps; and how to navigate using a compass and GPS. The navigation unit has field exercises, and the final field exercise will total 8 hours. Meets National Wildfire Coordinating Group/California State Fire Marshal curriculum criteria. Prepares students for employment with wildland fire management agencies and municipal fire departments. Offered: As a National Wildfire Coordinating Group /State Fire Marshal CFSTES class.  
Hours: 27 lecture  
Transferable: CSU and private colleges.

### **FIRE B26M Display Processor**

1 unit

Description: This course provides students with the skills necessary to perform as a display processor (DPRO). Topics include general roles and responsibilities and how to assist the situation unit leader with producing incident maps, inputs for the Incident Status Summary (ICS-209) and other incident products. Pre-course work, students need to read specific chapters in Basic Land Navigation (NFES 2865). This class is a National Wildfire Coordinating Group /State Fire Marshal CFSTES class.  
Hours: 18 lecture  
Transferable: CSU and private colleges.

### **FIRE B27B 1-300 Incident Command System**

1.5 units

Description: 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 example 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. Offered as a National Wildfire Coordinating Group /State Fire Marshal CFSTES class.  
Hours: 27 lecture  
Transferable: CSU and private colleges.

### **FIRE B28B L-280 Followership to Leadership**

1 unit

Description: This training course is designed as a self-assessment opportunity for individuals preparing to step into a leadership role. The course combines classroom and lab (in the field) instruction, with students working through a series of problem solving events in small teams (Field Leadership Assessment Course).  
Hours: 20 lecture  
Transferable: CSU and private colleges.

### **FIRE B29 S-212 Wildland Fire Chain Saws**

2 units

Description: Prepares students to become a wildfire powersaw operator 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/California State Fire Marshal Curriculum. Intended for students to pursue a career with a federal or state wildland fire management agency or as specialty training with a municipal/county fire agency.  
Hours: 36 lecture  
Transferable: CSU and private colleges.

### **FIRE B30 RT130 Wildland Skill Refresher**

2 units

Description: Annual fireline Safety Refresher Training is designed to provide up-to-date fireline safety information to anyone who will be working on the fireline. The RT130 class was developed to recognize hazards, mitigate risk, maintain safe practices, and reduce accidents and near misses on the fire ground.

Hours: 9 lecture, 81 lab

Repeat: unlimited, legally mandated training

Transferable: Not transferable. Not degree applicable.

### **FIRE B51F Fire Investigation 1A**

2 units

Description: This course provides the participants with an introduction and basic overview of fire scene investigation. The focus of the course is to provide information on fire scene indicators and to determine the fire's origin. 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 lab services, and investigative responsibilities of an investigator at location of arson and explosives incidents. Meets P.O.S.T. certification requirements. Offered as a State Fire Marshal CFSTES class.

Hours: 40 lecture

Transferable: Not transferable. Not degree applicable.

### **FIRE B51G Training Instructor 1A**

2 units

Description: This is the first of a three-course series. Topics include methods and techniques for training in accordance with the latest concepts in career education; selecting, adapting, organizing, and using instructional materials appropriate for teaching cognitive lessons; criteria and methods to evaluate teaching and learning efficiency; and an opportunity to apply major principles of learning through teaching demonstrations. Two student teaching demonstrations are required of each student.

Hours: 40 lecture

Transferable: Not transferable. Not degree applicable.

### **FIRE B51H Training Instructor 1B**

2 units

Description: This is the second of a three-course series. Topics include methods/techniques for training with the latest concepts in career education; selecting, adapting, organizing, and using instructional materials appropriate for teaching psycho-motor lessons; criteria and methods to evaluate teaching and learning efficiency; and an opportunity to apply major principles of learning through teaching demonstrations. Two student teaching demonstrations are required of each student.

Hours: 40 lecture

Transferable: Not transferable. Not degree applicable.

### **FIRE B51J Fire Investigation 1B**

2 units

Description: Topics of discussion include the juvenile fire setter, report writing, evidence collection and preservation procedures. Course meets P.O.S.T. certification requirements.

Hours: 40 lecture

Transferable: Not transferable. Not degree applicable.



**FIRE B51K Fire Command 1C**

2 units

Description: This course is designed around the responsibilities of the Company Officer at a wildland/urban interface incident. It will bring the structural Company Officer out of the city and into the urban/interface; in other words, from his or her comfort zone into an area that could very well be quite unfamiliar for Fire Service Officers.

Hours: 32 lecture, 8 lab

Transferable: Not transferable. Degree applicable.

**FIRE B51L Fire Apparatus Driver Operator 1A**

2 units

Prerequisite: FIRE B62 or FIRE B63 with a grade of 'C' or better and a California Class B driver's license, fire fighter restricted.

Description: This course provides the student with information on driver responsibilities, recognized standards, and related laws for fire apparatus reflecting current California Vehicle Code requirements and the 2009 NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications. Topics include basic inspections, documentation, maintenance, and troubleshooting fire apparatus, and techniques on driving and positioning fire apparatus. Each student also has the opportunity to increase his or her driving skills during simulated driving conditions.

Hours: 24 lecture, 16 lab

Transferable: Degree applicable.

**FIRE B51M Fire Apparatus Driver/Operation 1-B**

2 units

Prerequisite: California driver's license, Class A, B or C, with a fire fighter endorsement.

Description: This course was developed to reflect the 2009 NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications. This course provides the student with information on pump construction and theory of pump operations. Topics include methods for performing basic hydraulics and techniques on basic inspections, documentation, maintenance, and troubleshooting fire pumps. Each student also has the opportunity to increase his or her pumping skills during simulated pumping conditions.

Hours: 24 lecture, 16 lab

Transferable: Not transferable. Not degree applicable.

**FIRE B52A Company Officer 2A**

2.5 units

Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.

Description: This course provides information on the use of human resources to accomplish assignments, evaluating member performance, supervising personnel, and integrating health and safety plans, policies, and procedures into daily activities as well as the emergency scene.

Hours: 45 lecture

Transferable: Not transferable. Degree applicable.

**FIRE B52B Company Officer 2B**

1.5 units

Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.

Description: This course provides information on general administrative functions, the implementation of department policies and procedures, and addresses conveying the fire department's role, image, and mission to the public.

Hours: 27 lecture

Transferable: Not transferable. Degree applicable.

**FIRE B52C Company Officer 2C**

2.5 units

Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.

Description: This course provides information on conducting inspections, identifying hazards and addressing violations, performing a fire investigation to determine preliminary cause, securing the incident scene and preserving evidence.

Hours: 45 lecture

Transferable: Not transferable. Degree applicable.

**FIRE B52D Company Officer 2D**

2.5 units

Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.

Description: This course provides information on conducting incident size-up, developing and implementing an initial plan of action involving single and multi-unit operations for various types of emergency incidents to mitigate the situation following agency safety procedures, conducting pre-incident planning, and develop and conduct a post-incident analysis.

Hours: 45 lecture

Transferable: Not transferable. Degree applicable.

**FIRE B52E Company Officer 2E**

2.5 units

Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.

Description: This course provides information on evaluating and reporting incident conditions, analyzing incident needs, developing and implementing a plan of action to deploy incident resources completing all operations to suppress a wildland fire, establishing an incident command post, creating an incident action plan, and completing incident records and reports.

Hours: 45 lecture

Transferable: Not transferable. Degree applicable.

**FIRE B52F Chief Fire Officer 3A**

1.5 units

Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.

Description: This course provides students with a basic knowledge of the human resources requirements related to the roles and responsibilities of a Chief Fire Officer including developing plans for providing employee accommodation, developing hiring procedures, establishing personnel assignments, describing methods of facilitating and encouraging professional development, developing an ongoing education training program, developing promotion procedures, developing proposals for improving employee benefits, and developing a measurable accident and injury prevention program.

Hours: 27 lecture

CCS: Credit Course

Transferable: Not transferable. Degree applicable.

**FIRE B52G Chief Fire Officer 3B**

1 unit

Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.

Description: This course provides students with a basic knowledge of the budgeting requirements related to the roles

and responsibilities of a Chief Fire Officer including developing a budget management system, developing a division or departmental budget, and describing the process for ensuring competitive bidding.

Hours: 18 lecture

Transferable: Not transferable. Degree applicable.

### **FIRE B52H Chief Fire Officer 3C**

1.5 units

Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.

Description: This course provides students with a basic knowledge of the administration requirements related to the roles and responsibilities of a Chief Fire Officer including directing a department record management system, analyzing and interpreting records and data, developing a model plan for continuous organizational improvement, developing a plan to facilitate approval, preparing community awareness programs, and evaluating the inspection program of the AHJ.

Hours: 27 lecture

Transferable: Not transferable. Degree applicable.

### **FIRE B52I Chief Fire Officer 3D**

1.5 units

Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.

Description: This course provides students with a basic knowledge of the emergency service requirements related to the roles and responsibilities of a Chief Fire Officer including developing a plan for the integration of fire services resources, developing an agency resource contingency plan, evaluating incident facilities, supervising multiple resources, developing and utilizing an incident action plan, obtaining incident information to facilitate transfer of command, developing and conducting a post-incident analysis, and maintaining incident records.

Hours: 27 lecture

Transferable: Not transferable. Degree applicable.

### **FIRE B52J Executive Chief Fire Officer 4A**

2 units

Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.

Description: This course provides the skills and knowledge needed for the Executive Chief Fire Officer to perform his/her duties safely, effectively, and competently. The overarching themes of this curriculum are recruitment, selection, and placement of human resources; the development of a positive and participative member/management program; the establishment and evaluation of a list of education and in-service training goals; appraisal of a member assistance program; and the evaluation of an incentive program to determine if the desired results are achieved.

Hours: 36 lecture

Transferable: Not transferable. Degree applicable.

### **FIRE B52K Executive Chief Fire Officer 4B**

1 unit

Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.

Description: This course provides the skills and knowledge needed for the Executive Chief Fire Officer to perform his/her duties safely, effectively, and competently. The overarching theme of this curriculum is assuming a leadership role in community events.

Hours: 18 lecture

CCS: Credit Course

Transferable: Not transferable. Degree applicable.

### **FIRE B52L Executive Chief Fire Officer 4C**

2 units

Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.

Description: This course provides the skills and knowledge needed for the Executive Chief Fire Officer to perform his/her duties safely, effectively, and competently. The overarching themes of this curriculum are developing a comprehensive, long-range plan; evaluating and projecting training requirements, facilities, and building needs; completing a written comprehensive risk, hazard, and value analysis; and developing a plan for a capital improvement project or program.

Hours: 36 lecture

Transferable: Not transferable. Degree applicable.

### **FIRE B52M Executive Chief Fire Officer 4D**

2.5 units

Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.

Description: This course provides the skills and knowledge needed for the Executive Chief Fire Officer to perform his/her duties safely, effectively, and competently. The overarching themes of this curriculum are developing a comprehensive disaster plan and a comprehensive plan for the organization to operate at a civil disturbance.

Hours: 45 lecture

Transferable: Not transferable. Degree applicable.

### **FIRE B52N Executive Chief Fire Officer 4E**

1 unit

Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.

Description: This course provides the skills and knowledge needed for the Executive Chief Fire Officer to perform his/her duties safely, effectively, and competently. The overarching theme of this curriculum is maintaining, developing, and providing leadership for a risk management program.

Hours: 18 lecture

Transferable: Not transferable. Degree applicable.

### **FIRE B52O Instructor 1 - Instructional Methodology**

2 units

Description: This course provides the skills and knowledge needed for the entry level professional instructor to perform his or her duties safely, effectively, and competently. The curriculum is based on the 2012 edition of NFPA 1041 Standard for Fire Service Instructor Professional Qualifications. At the end of this course, candidates for Instructor I certification will be able to teach and deliver instruction from a prepared lesson plan utilizing instructional aids and evaluation instruments. The Instructor I will also be able to adapt a lesson plan and complete the reporting requirements to the local jurisdiction.

Hours: 40 lecture

Transferable: Not transferable. Not degree applicable.

### **FIRE B60 Driver/Operator Certification**

2 units

Description: 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.

Hours: 32 lecture, 8 lab

Transferable: Not transferable. Degree applicable.

### **FIRE B62 Fire Fighter I Academy**

12.5 units

Prerequisite: Physical agility, medical physical, live scan, and uniform.

Description: 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.

Hours: 108 lecture, 351 lab

Transferable: CSU and private colleges. Degree applicable.

### **FIRE B63 Fire Fighter II Academy**

3.5 units

Description: Advanced academic and manipulative training essential for the achievement of job tasks specified for Fire Fighter II. Covers general knowledge germane to the profession, fire department communications, fire ground operations, rescue operations, and prevention, preparedness, and maintenance. The curriculum is based on the 2013 edition of NFPA 1001 Standard for Fire Fighter Professional Qualifications. Meets requirements for the California State Board of Fire Services, Fire Fighter II certification.

Hours: 42 lecture, 76 activity/skills, 8 testing

Transferable: Not transferable. Degree applicable.

### **FIRE B64 State Fire Fighter I Academy**

16.5 units

Prerequisite: Successful completion of EMTC B51 with a grade of C or better. Physical agility, medical physical, live scan, and uniform.

Description: Provides the skills and knowledge needed for the entry level fire fighter, career or volunteer, to perform their duties safely, effectively, and competently. The curriculum is based on the 2013 edition of NFPA 1001 Standard for Fire Fighter Professional Qualifications, the 2012 edition of NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications and the 2008 edition of NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. The curriculum includes: fire department communications, fire ground operations, rescue operations, preparedness and maintenance, wildland suppression activities, and hazardous materials/WMD.

Hours: 171 lecture, 378 lab

Transferable: Not transferable. Degree applicable.

### **FIRE B66 Fire Fighting Skills**

8 units

Prerequisites: Successful completion of FIRE B62 or FIRE B63 or FIRE B64 with a grade of C or better.

Description: Professional development workshops and seminars related to fire fighting skills. Practical experience including utilization of fire 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.

Hours: 90 lecture, 162 lab

Repeat: unlimited, legally mandated training

Transferable: Not transferable. Not degree applicable.

### **FIRE B69 State Fire Fighter II Academy**

4 units

Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.

Description: This course provides the skills and knowledge needed for the entry level professional fire fighter to perform his/her duties safely, effectively, and competently. The five overarching themes of the California State Fire Fighter II curriculum are: general knowledge germane to the profession, fire department communications, fire ground operations, rescue operations, and prevention, preparedness, and maintenance.

Hours: 45 lecture, 81 lab

Transferable: Not transferable. Degree applicable.

### **FIRE B70A Hazardous Materials for First Responders**

1 unit

Description: This class is 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. Defensive tactics to contain the release from a safe distance, keep it from spreading, and prevent exposures without trying to stop the release. Meets and exceeds the requirements of CFR 29 1910.120 and CCR Title 8. This course meets National Wildfire Coordinating Group and State Fire Marshal CFSTES class.

Hours: 24 lecture

Transferable: Not transferable. Not degree applicable.

### **FIRE B70B First Responder Operational-Decontamination**

0.5 unit

Description: This course will provide the hazardous materials emergency responder with the processes used in decontamination and methods to limit the spread of hazardous materials contamination in a safe and competent manner. As a National Wildfire Coordinating Group /State Fire Marshal CFSTES/ CSTI class.

Hours: 9 lecture

Transferable: Not transferable. Not degree applicable.

### **FIRE B70C Hazardous Materials Incident Commander/Scene Manager**

1 unit

Description: 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 Occupational Education

Hours: 18 lecture

Transferable: Not transferable. Not degree applicable.

### **FIRE B70D Hazardous Materials Technician/Spec 1A: Basic Chemistry**

2 units

Description: 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. This also meets the State Fire Marshal California State Training Institute and CSTI California State Training Institute course requirements, Occupational Education.

Hours: 40 lecture

Transferable: Not transferable. Not degree applicable.

**FIRE B70E Hazardous Materials Technician/Specialist 1B: Applied Chemistry**

2 units

Description: This course will review the basic terminology and theory of chemistry as it relates to hazardous materials incident management. Additional new content to include: 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 lecture

Transferable: Not transferable. Not degree applicable.

**FIRE B70F Hazardous Materials Technician/Specialist 1C: Incident Considerations**

2 units

Description: 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 and is a California State Training Institute class.

Hours: 32 lecture, 8 lab

Transferable: Not transferable. Not degree applicable.

**FIRE B70G Hazardous Materials Tech/Spec 1D: Tactical Field Operations**

1.5 units

Description: 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. Offered: As a California State Training Institute class.

Hours: 18 lecture, 27 lab

Transferable: Not transferable. Not degree applicable.

**FIRE B70H Hazardous Materials Tech/Spec 1E: Special Mitigation Techniques**

1 unit

Description: 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 a member of a hazardous materials team in simulated hazardous materials incidents. Applies to Hazardous Materials Technician/Specialist certification.

Hours: 9 lecture, 31 lab

Transferable: Not transferable. Not degree applicable.

**FIRE B70I Hazardous Materials Tech/Spec 1F: Advanced Field Operations**

1 unit

Description: 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 hazardous materials team in simulated hazardous materials incidents; and exercising safe methods while operating at hazardous materials incidents. Applies to Hazardous Materials Technician/Specialist certification.

Hours: 9 lecture, 31 lab

Transferable: Not transferable. Not degree applicable.

**FIRE B71A Seasonal Firefighter Basic Training 1**

2 units

Description: All of the federal fire agencies and many municipal fire departments recognize this course as the foundation to all subsequent wildland fire training. This is "The Basics" it will provide students with an understanding of wildland firefighting principals, tactics, organization, and fireline safety. This class covers NWCG L180, S130, and S190 course material.

Hours: 27 lecture, 27 lab

Transferable: Not transferable. Degree applicable.

**FIRE B71B Seasonal Firefighter Basic Training 2**

1 unit

Prerequisites: Successful completion of FIRE B71A with a grade of 'C' or better.

Description: Manipulative and technical training in the identification and operation of wildland fire tools and equipment. Includes fire-line construction practices, physical fitness and water-handling equipment. Satisfies one-half of required training standards.

Hours: 9 lecture, 27 lab

Transferable: Not transferable. Degree applicable.

**FIRE B71E Wildland Fire Behavior and Control**

0.5 unit

Description: 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 lecture

Transferable: Not transferable. Not degree applicable.

**FIRE B72A Rescue Systems 1**

2 units

Description: Technical knowledge and practical skills necessary to successfully perform team organization, rescue, and environmental considerations, use of ropes, knots rigging and pulley systems, descending, rappelling, and belaying tools and techniques, subsurface rescue techniques, use of cribbing, wedges, cutting/prying and hydraulic tools, use of fire service ladders in specialized rescue situations, and day and night simulated rescue exercises. Accredited by the California Fire Service Training and Education System.

Hours: 24 lecture, 16 lab

Transferable: Not transferable. Not degree applicable.

**FIRE B72D Swift Water Rescue**

1 unit

Description: 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 hazard and problems in swift water emergencies.

Hours: 18 lecture

Transferable: Not transferable. Not degree applicable.

**FIRE B72F Auto Extrication**

0.5 unit

Description: A systematic approach to vehicle rescue, and the use of mechanical and hand tools used in the extrication process.

Hours: 9 lecture, 7 lab

Transferable: Not transferable. Not degree applicable.

**FIRE B72I Emergency Medical Technician I Refresher**

1 unit

Prerequisites: Successful completion of FIRE B72H or equivalent with a grade of 'C' or better.

Description: A review of material in FIRE B72H with updates on EMT-1 issues and new material or skill techniques. An approved refresher course that follows state regulations and leads to a re-certification completion certificate. This course meets the requirements to continue practicing pre-hospital emergency care in the County of Kern.

Note: Not open to students who have completed EMTC B50R.

Hours: 24 lecture

Transferable: Not transferable. Degree applicable.

**FIRE B73 Intermediate Wildland Fire Behavior S-290**

2 units

Description: Professional development related to the topic of wildland fire behavior. This course provides instruction in the identification and prediction of wildland fire behavior in various fuel types and under varying weather conditions. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Inter-agency Incident Management System.

Hours: 36 lecture

Transferable: Not transferable. Not degree applicable.

**FIRE B79 Regional Instructor Orientation**

0.5 unit

Description: This course is designed to provide instructors with an overview of State Fire Training, instructor registration requirements, instructor responsibilities and accountability, how to schedule and return courses, and manual procedures.

Hours: 9 lecture

Transferable: Not transferable. Not degree applicable.

**FIRE B85 Special Topics/Fire**

0.5-3 units

Description: Various mandated training topics required by California State Fire Marshal (CSFM).

Hours: 9 lecture hours for each .5 unit (9-54)

Repeat: Unlimited

Transferable: Not transferable. Not degree applicable.

**FORE - Forestry Courses****FORE B1 Introduction to Forestry**

3 units

Recommended: BC placement into reading level 06.

Description: 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.

Hours: 54 lecture

Transferable: UC, CSU and private colleges

**FORE B2 Natural Resources**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; CSU GE E; BC GE B.1

**FORE B3 Wildlife Management**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: The practice of wildlife management. Foundations of wildlife production. The identification, life histories and ecology of selected important wildlife species - mammals including fur bearers, water fowl and fish.

Hours: 54 lecture

Transferable: CSU and private colleges.

**FORE B4 Wildlife Law Enforcement**

3 units

Recommended: BC placement into reading level 06.

Description: A brief history of the development of wildlife law enforcement. State functions and jurisdiction; federal jurisdiction, federal wildlife laws, federal versus state jurisdiction; rights of the private citizen. Types of violations and the role of the law enforcement officer. The function of the officer, including arrests, preparation of evidence, interviewing and court appearances.

Hours: 54 lecture

Transferable: CSU and private colleges.

**FORE B5 Identification of California Wildlife**

3 units

Description: A survey of game birds, fish, mammals of California and the Western United States. Characteristics of game animals and protected species. Practices identifying animals in their environment. Emphasizes protecting species which are in danger of extinction.

Hours: 54 lecture

Transferable: CSU and private colleges.

**FORE B6 Forestry Skills**

3 units

Recommended: BC placement into reading level 06.

Description: 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. Field trips required. Transfers as an Agriculture elective.

Hours: 18 lecture, 108 lab

Transferable: CSU and private colleges.

**FORE B7 Wildland Fire Management**

3 units

Description: 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. Field trips may be required.

Hours: 54 lecture

Transferable: CSU and private colleges.

**FORE B48WE Occupational Work Experience Education**

1-8 units

Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.

Description: College credit for forestry related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.

Hours: Non-paid 60 hours for each 1 unit (60 - 480). Paid 75 hours for each 1 unit (75 - 600).

Transferable: CSU and private colleges.

## GEOG - Geography Courses

**GEOG B1 Physical Elements of Geography**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: This course is the study of the earth as a physical system and its processes. Topics of inquiry are derived from the earth's four main spheres, the atmosphere, hydrosphere, lithosphere, and biosphere. They include weather and climate, earth-sun relationships, geology, and landforms. Geographic techniques such as mapping, Geographic Information Systems (GIS) and Remote Sensing are also discussed.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 5.A; CSU GE B.1; BC GE B.1

**GEOG B1L Physical Geography Lab**

1 unit

Prerequisites: Successful completion of GEOG B1 with a grade of C or better or may be taken concurrently.

Recommended: BC placement into reading level 06 and writing level 06.

Description: Lab portion of Physical Geography is designed to demonstrate how material presented in Geography B1 can be

applied in a working environment. 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, landform development, and topographic map interpretation.

Hours: 54 lab

Transferable: UC, CSU and private colleges; IGETC 5.C; CSU GE B.3; BC GE B.1

**GEOG B2 Human Geography**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: This course is designed to demonstrate how different human populations interact culturally with their environment. Special emphasis will be placed on concepts such as population, movement, human-earth relationships, languages, religion, economics and politics.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 4.E; CSU GE D.5; BC GE D.2

**GEOG B3 Introduction to Weather and Climate**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: This course is an introduction to the earth's atmosphere, weather and climate. Topics to be discussed include solar and terrestrial energy, atmospheric composition, earth-sun relationships, temperature changes, wind and pressure systems, destructive weather patterns, frontal systems, and climate.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 5.A; CSU GE B.1; BC GE B.1

**GEOG B5 World Regional Geography**

3 units

Recommended: BC placement into reading level 06.

Description: Survey of the world's cultural regions and nations as interpreted by geographers, including physical, cultural, and economic features. Emphasis on spatial and historical influences on population growth, transportation networks, and natural environments. Identify important and significant features within regions.

C-ID: GEOG 125

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 4.E; CSU GE D.5

## GEOL - Geology Courses

**GEOL B10 Introduction to Geology**

3 units

Prerequisites: BC placement into reading level 06 and writing level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent and ENGL B50 or equivalent with a grade of C or better.

Description: 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 lab experience should enroll in GEOL B10L

concurrently with GEOL B10.

Note: At least one Saturday field trip or equivalent optional. Not open to students who have successfully completed GEOL B1A.

Hours: 54 lecture

C-ID: GEOL 100

Transferable: UC, CSU and private colleges; IGETC 5.A; CSU GE B.1; BC GE B.1

### **GEOL B10L Introduction to Geology Lab**

1 unit

Prerequisites: Successful completion of GEOL B10 with a grade of C or better. GEOL B10L may be taken concurrently with GEOL B10.

Description: Exercises planned to accompany the lectures of GEOL B10. Identification of rocks and minerals, topographic and geologic map exercises demonstrating the work of water, wind, ice and gravity and effects of volcanism and earthquakes. Field trips required.

Hours: 54 lab

C-ID: GEOL 100L

Transferable: UC, CSU and private colleges; IGETC 5.C; CSU GE B.3; BC GE B.1

### **GEOL B11 Historical Geology**

3 units

Prerequisites: BC placement into reading level 06 and writing level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent and ENGL B50 or equivalent with a grade of C or better.

Description: 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 lab experience should enroll in GEOL B11L concurrently with GEOL B11. At least one Saturday field trip or equivalent required.

Hours: 54 lecture

C-ID: GEOL 110

Transferable: UC, CSU and private colleges; IGETC 5.A; CSU GE B.1; BC GE B.1

### **GEOL B11L Historical Geology Lab**

1 unit

Prerequisites: Successful completion of GEOL B11 with a grade of C or better. GEOL B11L may be taken concurrently with GEOL B11.

Description: 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. Introduction to classification using cladistics. A Field Trip is required.

C-ID: GEOL 110L

Hours: 54 lab

Transferable: UC, CSU and private colleges; IGETC 5.C; CSU GE B.3; BC GE B.1

### **GEOL B21 Topics in Geology**

1-3 units

Recommended: BC placement into reading level 06.

Description: 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. Field trips required.

Hours: 18 lecture hours for each unit (18-54)

Transferable: CSU and private colleges.

## **HEIT - Health Information Technology Courses**

### **HEIT B10 Introduction to Health Information Technology: Hospital Settings**

3 Units

Description: This course is an introduction to health records systems in the acute care setting focusing on procedures for completion, maintenance, and preservation of health information. The relationship between health information management and the health care delivery system will also be discussed. Students will become familiar with the concept of accreditation, certification, and licensing of health care facilities with emphasis on the accreditation survey process.

Hours: 54 lecture

Transferable: Degree applicability pending.

### **HEIT B11 Introduction to Health Information Technology: Alternative Settings**

3 Units

Description: This course is an introduction to health information management practice in alternative healthcare settings including long-term care, mental health ambulatory care, hospice, home health, and rehabilitation medicine. Focus is on the role of the health information practitioner, regulatory issues, accreditation and licensing requirements, documentation, funding and reimbursement, and electronic information systems.

Hours: 54 lecture

Transferable: Degree applicability pending.

### **HEIT B12 Basic Pharmacology**

3 Units

Description: Introduction to pharmacology, basic pharmacological terminology and concepts, drug categories and their uses, mechanisms of drug action, dosage forms, routes of administration, and common generic and trade name medications.

Hours: 54 lecture

Transferable: Degree applicability pending.

### **HEIT B13 Human Disease**

3 Units

Prerequisites: Successful completion of MEDS B60 with a grade of C or better.

Description: This course is a study of pathological processes imparting basic knowledge to Health Information Technology students. The student will study the basic concepts, terminology, etiology and characteristics of pathological processes. Diseases are classified according to both causative agent and the body system to which they relate.

Hours: 54 lecture

Transferable: Degree applicability pending.

**HEIT B15 Health Statistics**

3 Units

Description: This course provides instruction for the health information technology student in the basic principles of data collection and calculation of hospital and non-acute facility health statistics. Calculation of Health Information Management department statistics is included. In addition, the course covers the calculation of specific vital statistics as well as discharge analysis reporting. There is instruction in the preparation of monthly and annual medical, administrative, and outside agency reports utilizing tables and graphs. Practice in the interpretation of statistical reports is also provided.

Hours: 54 lecture

Transferable: Degree applicability pending.

**HEIT B16 Computerized Health Information Systems**

3 Units

Description: This course will provide practical experience in the use of software programs commonly used in health information, including master patient index, chart tracking, abstracting, encoders and groupers, release of information, birth registration, and incomplete record management systems. Emphasis will also be placed on the use of spreadsheet and database programs in the manipulation and use of health information.

Hours: 54 lecture

Transferable: Degree applicability pending.

**HEIT B20 International Classification of Diseases, (ICD) Coding I**

4 Units

Prerequisites: Successful completion of HEIT B13 with a grade of C or better.

Description: This is the first of a two-course sequence for Health Information Technology students. It focuses on the International Classification of Diseases (ICD), the most commonly used classification system in the U.S. for coding and reporting diagnostic inpatient and outpatient services and inpatient procedural services. Coding guidelines, conventions and reimbursement methodology are covered in this course. The student uses both the code books and computer software program.

Hours: 72 lecture

Transferable: Degree applicability pending.

**HEIT B21 International Classification of Diseases, (ICD) Coding II**

4 Units

Prerequisites: Successful completion of HEIT B20 with a grade of C or better.

Description: This course is the second of a two-course sequence for Health Information Technology students. The emphasis is on advanced principles of International Classification of Diseases (ICD), the most commonly used classification system in the U.S. for coding and reporting diagnostic inpatient and outpatient services and inpatient procedural services. Coding guidelines, conventions and reimbursement methodology are also covered. Advanced principles include Diagnostic Related Group (DRG) case mix derivation, analysis of compliant coding, documentation improvement for correct code assignment, hospital acquired conditions, and present admission indicators that impact the code assignment and revenue cycle. The student uses both the code books and computer software program.

Hours: 72 lecture

Transferable: Degree applicability pending.

**HEIT B22 Current Procedural Terminology (CPT) Coding**

3 Units

Prerequisites: Successful completion of HEIT B13 with a grade of C or better.

Description: This introductory course for Health Information Technology students includes the use of Current Procedural Terminology (CPT) coding. The course covers the purpose of CPT, CPT Manual format, code format, and coding steps used to code from the divisions of CPT. In addition, the course includes national and category III codes. It also includes an overview of reimbursement issues involving physician and hospital payment for outpatient services.

Hours: 54 lecture

Transferable: Degree applicability pending.

**HEIT B23 Medical Legal Aspects of Health Information**

3 Units

Description: This course for health information technology students covers the legal aspects of health information management, including the American legal system and causes of medical malpractice. State, Federal and other agency rules regarding record access, retention, release of information, processing subpoenas, and confidentiality will be covered. Also included are accreditation, licensing, and certification requirements for acute as well as non-acute health care facilities.

Hours: 54 lecture

Transferable: Degree applicability pending.

**HEIT B24 Healthcare Quality Management**

3 Units

Description: This course for Health Information Technology students is an introduction to quality and performance management and improvement, utilization review and risk management. The course includes the purpose, principles, historical development, assessment and analysis techniques, and application and program development strategies used in quality management and improvement, utilization review and risk management activities. Also included is the integration of performance improvement activities with the medical staff appointment and reappointment process. Regulatory and privacy requirements will also be addressed. The key concepts, background and statistical tools used in the continuous quality improvement process (CQI) are also provided.

Hours: 54 lecture

Transferable: Degree applicability pending.

**HEIT B25 Healthcare Reimbursement**

3 Units

Description: This course integrates information about all US healthcare payment systems. The topics covered include reimbursement methodologies, clinical coding and compliance, voluntary and government sponsored insurance plans, revenue cycle management and value-based purchasing. Medicare and Medicaid prospective payment systems are also addressed in acute, post-acute, ambulatory, hospice and long term care settings.

Hours: 54 lecture

Transferable: Degree applicability pending.

**HEIT B26 Supervision for the Allied Health Professional**

3 Units

Description: This course studies classic and current management principles in the healthcare setting. Students will be introduced to leadership styles, motivation principles, ethical standards,



communication principles, and strategies for dealing with difficult behavior in the workplace.

Hours: 54 lecture

Transferable: Degree applicability pending.

### **HEIT B30 Professional Practice: Health Information Technology**

4 Units

Prerequisites: Successful completion of HEIT B10, B11, B12, B13, B15, B16, B20, B21, B22, and B23 with a grade of C or better.

Description: This course provides supervised onsite professional practice experience in an assigned affiliate site for students enrolled in the Health Information Technology program. It is designed to help students assimilate theory with practical application in order to work toward achievement of American Health Information Management Association (AHIMA) entry-level competencies in a real-world environment.

Hours: 18 lecture, 162 lab

Transferable: Degree applicability pending.

### **HEIT B31 Professional Practice: Health Information Coding Specialist**

3 Units

Prerequisites: Successful completion of HEIT B20 and HEIT B22 with a grade of C or better.

Description: This course is a practicum in application of clinical classification systems, coding, case mix analysis, and use of coded and abstracted data. In addition to discussion which is focused on directed practice activities, supervised clinical experience focus on coding patient care records and are conducted as a non-paid, lab experience with an affiliated health agency or virtual online coding environment.

Hours: 36 lecture, 54 lab

Transferable: Degree applicability pending.

### **HEIT B60 Human Form And Function**

3 Units

Description: Introduction to the structure and function of the human body Includes structural components, spatial relationships, and body system interactions. Satisfies requirements for Health Information Technology, but will not fulfill requirements for nursing, physician assistant, occupational therapy, physical therapy, or pre-pharmacy majors.

Hours: 54 lecture

Transferable: Degree applicability pending.

## **HIST - History Courses**

### **HIST B1 World History from the Origins of Civilizations to 1600**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

C-ID: HIST 150

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE C.2; CSU GE D.6; BC GE D.2

### **HIST B2 History of the World (Since 1650)**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Interdisciplinary multimedia approach to the development of our interconnected and interdependent modern world since the 16th Century. Emphasis is on comparative history, world systems, modernization theory, cultural diffusion, and ecologies of core/periphery associations.

Hours: 54 lecture

C-ID: HIST 160

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE C.2; CSU GE D.6; BC GE D.2

### **HIST B4A European Civilization**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Survey of history of European civilization from its origin to 1650. Course will examine the different economic, intellectual, political, religious, cultural and social ideas and institutions of the different ethnic and national groups of Europe as they developed from its origin to 1650. Course includes critical thinking and evaluation skills development in analysis and interpretation of historical evidence.

Hours: 54 lecture

C-ID: HIST 170

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE C.2; CSU GE D.6; BC GE D.2

### **HIST B4B European Civilization**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: A survey history of the early and late modern eras in European History and its influence on other 'westernized' nations. Course will examine the different economic, intellectual, political, religious, cultural and social ideas and institutions of the different ethnic and national groups of Europe as they developed from 1600 to the present. Course includes critical thinking and evaluation skills development in analysis and interpretation of historical evidence.

Hours: 54 lecture

C-ID: HIST 180

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE C.2; CSU GE D.6; BC GE D.2

### **HIST B15 Civilizations of the Middle East**

3 units

Recommended: BC placement into reading level 06.

Description: 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.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE C.2; CSU GE D.6; BC GE D.2

### **HIST B17A History of the United States**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Note: HIST B17A is not a prerequisite to HIST B17B.

Hours: 54 lecture

C-ID: HIST 130

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE D.6; BC GE D.2; BC GE D.3

### **HIST B17B History of the United States Since 1870**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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. Partially satisfies the requirements in U.S. Constitution and American history and institutions.

Note: HIST B17A is not a prerequisite to HIST B17B.

Hours: 54 lecture

C-ID: HIST 140

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE D.6; BC GE D.2; BC GE D.3

### **HIST B18 History of California**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE C.2; CSU GE D.6; BC GE D.2; BC GE D.3

### **HIST B20A African American History of the United States**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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. Meets the Multicultural Requirement.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE D.3; CSU GE D.6; BC GE D.2; BC GE D.3

### **HIST B20B African American History/U.S.**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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,

American history and institutions.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE D.3; CSU GE D.6; BC GE D.2

### **HIST B25 Introduction to Women in American History**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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 US 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 US history.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.D; CSU GE D.4; CSU GE D.6; BC GE D.2

### **HIST B30A Early Chicano History**

3 units

Recommended: BC placement into reading level 06.

Description: 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. Not open to students who have successfully completed CHST B30A.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.D; IGETC 4.F; CSU GE D.3; CSU GE D.6; BC GE D.2

### **HIST B30B History of Chicanos in the Southwest**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Survey of the Chicanos and the U.S. with an emphasis on the developments in California and the Southwest from 1848 to 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 requirements in U.S. Constitution, American history and institutions.

Note: Not open to students who have taken the equivalent course, CHST B30B.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE D.3; CSU GE D.6; BC GE D.3

### **HIST B33 Latin American History**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Historical survey of the social, economic and political development of Latin America, including the formation of pre-Columbian civilization through establishments 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.

Note: Not open to students who have completed CHST B33.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE C.2; CSU GE D.3; CSU GE D.6; BC GE D.2

### **HIST B36 History of Native American Indians**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE D.3; CSU GE D.6; BC GE D.2; BC GE D.3

## **HLED - Health Education Courses**

### **HLED B1 Principles of Health Education**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: A survey of Health as expressed through the interdependence of the intellectual, emotional, environmental, physical, social and spiritual dimensions of wellness.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

## **HMSV - Human Services Courses**

### **HMSV B5 Human Services Internship**

2 units

Prerequisites: HMSV B40. Student must have completed HMSV B40, attend a mandatory orientation, and obtain the signature of the Human Services Program Coordinator before enrolling in HMSV B5.

Description: 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.

Note: 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.

Hours: 18 lecture, 54 lab

Repeat: 2

Transferable: CSU and private colleges.

### **HMSV B40 Introduction to Human Services**

3 units

Recommended: BC placement into reading level 06.

Description: 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.

Hours: 54 lecture

Transferable: CSU and private colleges.

## **INDA - Industrial Automation Courses**

### **INDA B100 Industrial Design Graphics I**

3 units

Prerequisites: Successful completion of INDR B12 with a grade of C or better and admission to Industrial Automation Bachelor's Degree program.

Description: The application of two-dimensional industrial design techniques (sketching, drafting, and Computer Aided Drafting) taught within the context of automation and process design. Students will gain design and management skills while generating process flow diagrams (PFD's), piping & instrumentation diagrams (P&ID's), and control panel layouts.

Hours: 36 lecture, 54 lab

Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

### **INDA B101 Industrial Design Graphics II**

3 units

Prerequisites: Successful completion of INDA B100 with a grade of C or better and admission to Industrial Automation Bachelor's Degree program.

Description: The application of three-dimensional industrial design techniques taught within the context of automation and process design. Students will utilize mechanical Computer Aided Drafting software (SolidWorks/Inventor) to design weldments, piping/conduit systems, and sheet metal assemblies. Design projects will emphasize technical and project management skills.

Hours: 36 lecture, 54 lab

Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

### **INDA B105 Materials Science for the Technician**

3 units

Prerequisites: Successful completion of PHYS B2A or PHYS B4A and MATH B1A OR MATH B2 OR MATH B6A with a grade of C or better and admission to Industrial Automation Bachelor's Degree program.

Description: An introduction to materials science for technicians and technologists. Topics to be presented include atomic structure of materials, electrical and mechanical properties, properties testing, basic metallurgy, corrosion and wear, and materials selection. Materials covered include ceramics, polymers and composites, steels, and nonferrous metal alloys. Students will also be introduced to processes including heat

treatment, surface treatments, polymer manufacturing, and composite fabrication.

Hours: 36 lecture, 54 lab

Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

### **INDA B110 Industrial Automation Networks**

*3 units*

Prerequisites: Successful completion of ELET B58 and ELET B61 with a grade of C or better and admission to Industrial Automation Bachelor's Degree program.

Description: The basic theory and implementation of industrial automation networks, including digital data, industrial control networks, instrumentation and process control bus and network standards, SCADA (Supervisory Control and Data Acquisition) and DCS (Distributed Control Systems), and essentials of human-machine interface (HMI) panels connection, programming, and modification of programs and features.

Hours: 36 lecture, 54 lab

Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

### **INDA B114 Industrial Safety Principles and Management**

*3 units*

Prerequisites: Admission to Industrial Automation Bachelor's Degree program

Description: An overview of components of successful safety and industry hygiene programs, best practices, OSHA reporting requirements, legal and ethical obligations of both employer and employee, principles of safety management, assessment of hazards associated with various industrial processes and facilities, and protective measures used to minimize hazards such as personal protective equipment, hazard management, education and training options, and incentive programs.

Hours: 54 lecture

Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

### **INDA B120 Industrial Automation Systems - Robotics**

*3 units*

Prerequisites: Successful completion of ELET B4 with a grade of C or better and admission to Industrial Automation Bachelor's Degree program.

Description: A study of industrial automation systems, including principles of robotics, power supplies and movement systems, sensing and end-of-arm tooling, and control systems and maintenance.

Hours: 36 lecture, 54 lab

Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

### **INDA B122 Applied Methods of Motion and Process Control**

*3 units*

Prerequisites: Successful completion of ELET B55 or ELET B55a and ELET B56 with a grade of C or better and admission to Industrial Automation Bachelor's Degree program.

Description: Methods of implementing and documenting industrial instrumentation and control for use in process and motion control. Implementation of controller operations using stand-alone PID (proportional integral derivative) controllers and PLC (programmable logic controllers) including topics such as single and dual loop controller tuning, basic process control strategies, and process safety. Applications of instrumentation will focus on selection, connection, and calibration of industrial

sensors and signaling methods. Measurement parameters will include, pressure, flow, temperature, level, distance, Ph (potential of hydrogen), RPM (revolution per minute), linear and angular velocity, and position. Applications of control will include Variable Frequency Drives (VFD), electric, pneumatic, and hydrologic actuators, and their application with control valves, motors, and servos for use in process and motion control. Students will research product data sheets and create documentation that cover topics such as process flow diagrams, P&ID's, loop diagrams, operation and troubleshooting procedures. Lab activities will be provided with actual equipment and software used in industry.

Hours: 36 lecture, 54 lab

Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

### **INDA B125 Operations Management in the Automation Field**

*3 units*

Prerequisite: Admission to Industrial Automation Bachelor's Degree program

Description: An Introduction to Operations Management and study of automation processes. Students will analyze and improve business processes in services and manufacturing, learning how to increase productivity and deliver high quality standards. Key concepts include process analysis, bottlenecks, flows rates, and inventory levels.

Hours: 54 lecture

Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

### **INDA B132 Project Management**

*3 units*

Prerequisites: Admission to Industrial Automation Bachelor's Degree program

Description: This course provides hard information and skills to work successfully in a project environment and to accomplish project objectives. It will equip students by explaining concepts and techniques and by using numerous examples to show how they can be skillfully applied. Topics covered in this course include project management life cycle and process; identifying and selecting projects; developing a project proposal; techniques for planning, scheduling, resource assignment, budgeting, and controlling project performance; project risks; project manager responsibilities and skills; project team development and effectiveness; project communication and documentation; and project management organizational structures. The concepts in the course support the project management knowledge areas of the Project Management Institute's A Guide to the Project Management Body of Knowledge (PMBOK® Guide).

Hours: 54 lecture

Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

### **INDA B135 Economic Decision Making**

*3 units*

Prerequisite: Admission to Industrial Automation Bachelor's Degree program

Description: A study of the methodologies for estimating and forecasting product and service costs. Topics include labor and material cost analysis; accounting analysis including financial statements, depreciation, budgeting, and overhead allocation; forecasting techniques; general cost estimating methods; operations estimating and analysis; product cost estimating, and

breakeven models

Hours: 54 lecture

Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

### **INDA B140 Quality Management**

*3 units*

Prerequisites: Admission to Industrial Automation Bachelor's Degree program

Description: An overview of the various methods of quality assurance (the systematic process of determining whether products meet customers' expectations), quality control (the systematic process of determining the quality and consistency of products), and efficient manufacturing processes (using techniques that determine the most efficient method of manufacturing and logistics). Strategies such as Six-Sigma, Lean Manufacturing, Failure Mode Analysis, ISO 9001, and various continuous improvement programs will be examined.

Hours: 54 lecture

Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

### **INDA B143 Materials and Maintenance Management**

*3 units*

Prerequisite: Admission to Industrial Automation Bachelor's Degree program

Description: Principles and practices of maintenance department organization, prevention procedures, and typical equipment problems. Includes related topics such as plant protection, preventative and plant maintenance. Analytical methods used to support inventory replenishment for the production of goods and services.

Hours: 54 lecture

Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

### **INDA B144 Leadership**

*3 units*

Prerequisites: Admission to Industrial Automation Bachelor's Degree program

Description: Fundamental historical basis of ethics and character are studied with emphasis on the origin of the factors that many cultures derive their ethical standards. Relationship of how these standards relate to operations management and business. The characteristics of leadership and the ethical qualities that make a person an effective leader in today's business and industrial environment are analyzed. The laws of leadership and examples that specific leaders exhibit these laws are discussed with emphasis on individual growth as a leader in today's market.

Hours: 54 lecture

Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

### **INDA B150 Systems Design and Integration (Senior Project)**

*3 units*

Prerequisites: Admission to Industrial Automation Bachelor's Degree program and INDA B132 with a grade of C or better.

Description: Students will work in teams to design, plan for production, and integrate various automation technologies into the production of a simple product; or partner with industry members to analyze and provide recommendations for actual problems.

Hours: 9 lecture, 135 lab

Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

## **INDR - Industrial Drawing Courses**

### **INDR B12 Introduction to Drafting and CAD**

*2 units*

Description: Introductory course dealing with conventional drafting methods and a computer aided drafting and design (CAD) program to obtain graphic solutions, design modifications, and delineations for industrial, architectural, and engineering drawings. Emphasizes basic drafting and CAD skills.

Note: Not open to students who have taken INDR B10 and INDR B11.

Hours: 18 lecture, 54 lab

Transferable: CSU and private colleges.

### **INDR B20A Computer Aided Drafting and Design (CAD)**

*3 units*

Prerequisites: Successful completion of INDR B12 with a grade of C or better or equivalent experience to be evaluated by the instructor.

Description: An intensive course utilizing a computer aided design (CAD) program 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.

Materials Fee: \$10.00

Hours: 27 lecture, 81 lab

Transferable: UC, CSU and private colleges

### **INDR B20B Computer Aided Drafting and Design (CAD)**

*3 units*

Prerequisites: Successful completion of INDR B20A with a grade of C or better.

Description: Continuation of the sequence utilizing a computer aided drafting (CAD) program 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.

Materials Fee: \$3.00

Hours: 27 lecture, 81 lab

Transferable: CSU and private colleges.

### **INDR B40 Parametric Modeling Fundamentals**

*3 units*

Description: This class will introduce basic and advanced parametric modeling techniques. Three-dimensional models of mechanical objects will be used to generate two-dimensional drawings (including views, sections, details, dimensions, and assembly drawings). Emphasis on design and digital prototyping will run throughout the course. The course is project-based and will include the use of a 3D printer and the creation of animations to communicate design concepts.

Hours: 27 lecture, 81 lab

Transferable: Degree applicable.

**INDR B42 Introduction to Solidworks**

2 units

Description: A foundational course in the use of Solidworks mechanical design software. Students will utilize 3D solid modeling techniques to generate and edit parts, assemblies, and detail drawings.

Hours: 27 lecture, 27 lab

Transferable: Degree applicable.

**INDR B48WE Occupational Work Experience Education**

1-8 Units

Prerequisite: Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.

Description: College credit for Industrial Drawing related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 hours per semester unit at paid work experience; 60 hours per semester unit volunteer work experience per unit. Repetition allowed per Title 5 55253.

Hours: Non-paid 60 hours for each 1 unit (60-480). Paid 75 hours for each 1 unit (75-600).

Transferable: Not transferable. Not degree applicable.

**INDR B50 Process Piping**

3 units

Prerequisites: Successful completion of INDR B10 and INDR B11 or INDR B12 with a grade of C or better.

Description: An intermediate-level CAD course that is structured to impart the foundation knowledge and essential technical skills required to succeed in the field of process pipe drafting. Areas of study include units on industry standards, delineation conventions, and the creation of piping plans, isometric drawings, and process flow diagrams.

Materials Fee: \$5.00

Hours: 27 lecture, 81 lab

Transferable: Not transferable. Degree applicable.

**INDR B51 Electrical Design**

3 units

Prerequisites: Successful completion of INDR B12 with a grade of C or better.

Description: Introduces students to the techniques necessary to create professional electrical control drawings using AutoCAD Electrical. Elements included in the class include building circuits, creating panel drawings, ladder diagrams, and generating reports.

Materials Fee: \$3.00

Hours: 27 lecture, 81 lab

Transferable: Not transferable. Degree applicable.

**INDR B52 Civil Drafting and Geographic Information Systems**

3 units

Prerequisites: Successful completion of INDR B20A or equivalent with a grade of C or better.

Description: Modern Geographic Information Systems. Students will use CAD software to perform model-based infrastructure planning and development. Emphasis on solving problems in either Land Information Systems or Facilities Management Systems. Database Management will also be emphasized.

Hours: 27 lecture, 81 lab

Transferable: Not transferable. Degree applicable.

# INDT - Industrial Technology Courses

**INDT B5 Architectural Woodworking and Design**

1 unit

Prerequisites: Successful completion of ARCH B6 or equivalent with a grade of C or better or may be taken concurrently.

Description: 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.

Hours: 9 lecture, 27 lab

Transferable: CSU and private colleges.

**INDT B10 Occupational Readiness**

3 units

Description: 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. Elective credit only.

Hours: 54 lecture

Transferable: CSU and private colleges.

**INDT B48WE Occupational Work Experience Education**

1-8 Units

Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.

Description: College credit for Industrial Technology related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 hours per semester unit at paid work experience; 60 hours per semester unit volunteer work experience. Repetition allowed per Title 5 55253.

Hours: Paid 75 hours for each 1 unit (75-600). Non-paid 60 hours for each 1 unit (60-480).

Transferable: Not transferable. Not degree applicable.

**INDT B271 Special Problems in Welding**

2 units

Prerequisites: Successful completion of WELD B1A, WELD B1B, WELD B53A, WELD B74A, and WELD B74B with a grade of C or better.

Description: 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.

Hours: 27 lecture, 27 lab

Transferable: Not transferable. Degree applicable.

**INDT B272 Special Problems in Electronics**

2-3 units

Prerequisites: Completion of minimum of 9 units of electronics courses with a grade of 'C', or equivalent experience or evaluation by instructor. Completed Petition for Individual Study form.

Description: Provides individual students the opportunity to

explore various segments of electronics. Development and implementation of meaningful, self-directed studies in areas where student desires specific technical and related skills development necessary for enrichment or employment.  
Hours: 18 lecture hours for each unit (36-54)  
Transferable: Not transferable. Not degree applicable.

### **INDT B273 Special Problems in Machine Tool Metal Working**

2-3 units

Prerequisites: Completion of minimum of 6 units of machine tool courses with a grade of 'C' or equivalent experience or evaluation by instructor. Completed Petition for Individual Study form.  
Description: 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 student desires specific technical and related skills development necessary for enrichment or employment.  
Hours: 18 lab hours for each unit (36-54)  
Transferable: Not transferable. Not degree applicable.

### **INDT B274 Special Problems in Woodworking**

2-3 units

Recommended: Concurrent enrollment in a woodworking technology related course or previous woodworking and/or cabinetmaking experience.  
Description: 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  
Hours: 54 lab hours for each unit (108 – 162)  
Transferable: Not transferable. Not degree applicable.

### **INDT B275 Special Problems in Automotive Technology**

2 units

Description: 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.  
Hours: 27 lecture, 27 lab  
Transferable: Not transferable. Not degree applicable.

## **JAPN - Japanese Courses**

### **JAPN B1 Elementary Japanese I**

4 units

Recommended: BC placement into reading level 06 and writing level 06.  
Description: 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.  
Hours: 72 lecture  
Transferable: UC, CSU and private colleges; IGETC 6.A; CSU GE C.2; BC GE C.2

### **JAPN B2 Elementary Japanese II**

4 units

Prerequisites: Successful completion of JAPN B1 with a grade of C or better.  
Description: 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.  
Hours: 72 lecture  
Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 6.A; CSU GE C.2; BC GE C.2

### **JAPN B3 Intermediate Japanese**

4 units

Prerequisites: Successful completion of JAPN B2 with a grade of C or better.  
Description: Course provides the students with further knowledge and communication skills in Japanese in all 4 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 direct style and honorific style. Students should be able to read and write about 200 kanji (Chinese characters) in this course.  
Hours: 72 lecture  
Transferable: UC, CSU and private colleges; BC GE C.2

## **JRNL - Journalism Courses**

### **JRNL B1 Media and Society**

3 units

Recommended: BC placement into reading level 06 and writing level 06.  
Description: 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, 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. Field trips may be required.  
Hours: 54 lecture  
C-ID: JOUR 100  
Transferable: UC, CSU and private colleges; IGETC 4.G; CSU GE D.8; BC GE D.2

### **JRNL B2 Beginning Reporting**

3 units

Recommended: BC placement into reading level 06 and writing level 06.  
Description: 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.  
Hours: 54 lecture  
C-ID: JOUR 110  
Transferable: CSU and private colleges.

**JRNL B15 Press Photography**

3 units

Description: 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.

Hours: 36 lecture, 54 lab

C-ID: JOUR 160

Transferable: CSU and private colleges.

**JRNL B16 Multimedia Reporting**

3 units

Description: 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.

Hours: 36 lecture, 54 lab

C-ID: JOUR 120

Transferable: CSU and private colleges.

**JRNL B25 Newspaper/Online Production I**

3 units

Recommended: JRNL B2 with a grade of C or better and BC placement into reading level 06 and writing level 06.

Description: Production practicum for the print and online editions of 'The Renegade Rip,' BC's award-winning student-produced newspaper. Offers experience in interviewing research, news, feature, sports, and opinion reporting, design and production of editorial cartoons, headline writing, copyediting, proofreading, 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.

Hours: 18 lecture, 108 lab

Transferable: Not transferable.

**JRNL B26 Newspaper/Online Production II**

4 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Designed for editors and second-semester students for production 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.

C-ID: JOUR 131

Hours: 18 lecture, 162 lab

Transferable: CSU and private colleges. Degree applicable.

**JRNL B27A Newspaper Production/Reporters**

3 units

Recommended: Successful completion of JRNL B2 with a grade of C or better and BC placement into reading level 06 and writing level 06.

Description: Production practicum for the print and online

editions of The Renegade Rip, Bakersfield College's award-winning student-produced newspaper. Offers experience in interviewing, research, news, feature, sports, and opinion reporting, design and production of editorial cartoons, headline writing, copyediting, proofreading, 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.

Hours: 18 lecture, 108 lab

C-ID: JOUR 130

Transferable: CSU and private colleges.

## LIBR - Library Courses

**LIBR B1 Introduction to Library Research**

1 unit

Prerequisites: BC placement into reading level 06 and writing level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent or ENGL B50 or equivalent with a grade of C or better.

Description: Emphasizes developing research skills in order to locate and evaluate relevant and appropriate sources for college-level papers, speeches and other projects. Introduces students to advanced research techniques through the use of electronic databases, print resources, and the web, as well as the ethical use of information. Prepares students for research projects in English B50, English B1A, and other courses with research components.

Hours: 18 lecture

Transferable: UC, CSU and private colleges

**LIBR B55 Information Competency Workshops**

0 unit

Description: Variety of hour-long workshops that assist students in gaining proficiency in all aspects of information competency. Workshop topics include research strategies, searching the online catalog for books, finding periodical articles online, using advanced techniques with Internet searching, evaluating Internet resources, evaluating print resources, and examining ethics in research (plagiarism, fair use, and copyright).

Hours: 1 lecture

Repeat: unlimited

Transferable: Not transferable. Not degree applicable.

## MATH - Mathematics Courses

**MATH B1A Precalculus I**

4 units

Prerequisites: BC placement into math level 04 or successful completion of MATH B70 or equivalent with a grade of C or better. Description: 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.

Hours: 72 lecture

Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4; BC GE B.2



**MATH B1B Precalculus II**

4 units

Prerequisites: BC placement into math level 05 or successful completion of MATH B1A or equivalent with a grade of C or better.

Description: 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, and introduction to sequences and series.

Hours: 72 lecture

Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4; BC GE B.2

**MATH B2 Basic Functions and Calculus for Business**

4 units

Prerequisites: BC placement into Math level 05 or successful completion of B1A or equivalent with a grade of C or better.

Description: Modern concepts in mathematics emphasizing applications to business. Functions and the basic concepts of differential calculus with introductions to integral calculus and multivariable calculus.

C-ID: MATH 140

Hours: 72 lecture

Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4; BC GE B.2

**MATH B4A Mathematics for Elementary School Teaching**

4 units

Prerequisites: BC placement into math level 04 or successful completion of MATH B70 or equivalent with a grade of C or better.

Description: Focuses on the development of quantitative reasoning skills through in-depth, integrated explorations of topics in mathematics, including real number systems and subsystems. Emphasizes the comprehension and analysis of mathematical concepts and applications of logical reasoning. Designed for students intending to teach in K-8. Not recommended for majors in physical sciences nor mathematics.

C-ID: MATH 120

Hours: 72 lecture

Transferable: UC, CSU and private colleges; CSU GE B.4; BC GE B.2

**MATH B6A Analytic Geometry/Calculus I**

4 units

Prerequisites: BC placement into math level 06 or successful completion of MATH B1B or equivalent with a grade of C or better.

Description: Limits and differential calculus with an introduction to antiderivatives and integration. Includes analytic geometry and applications.

C-ID: MATH 211

Hours: 72 lecture

Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4; BC GE B.2

**MATH B6B Analytic Geometry/Calculus II**

4 units

Prerequisites: Successful completion of MATH B6A or equivalent with a grade of C or better.

Description: Transcendental functions, polar functions, sequences, infinite series and methods of integration. Further exposure to techniques and applications of differential and integral calculus.

C-ID: MATH 221

Hours: 72 lecture

Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4; BC GE B.2

**MATH B6C Calculus III**

4 units

Prerequisites: Successful completion of MATH B6B or equivalent with a grade of C or better.

Description: Continuation of Calculus II. Vectors and parametric equations, vector-valued functions, partial differentiation, multiple integrals, vector analysis, including theorems of Green, Gauss and Stokes.

C-ID: MATH 230

Hours: 72 lecture

Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4; BC GE B.2

**MATH B6D Ordinary Differential Equations**

3 units

Prerequisites: Successful completion of MATH B6C or equivalent with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: Vector spaces and linear transformations; elementary differential equations; Laplace transforms; series solutions and systems of differential equations; matrices; eigenvalues and eigenvectors.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4

**MATH B6E Elementary Linear Algebra**

3 units

Prerequisites: Successful completion of MATH B6C or equivalent with a grade of C or better.

Description: Real and complex number fields, vector spaces, linear transformation, matrices, systems of equations and matrix inversion, determinants, eigenvalues and eigenvectors.

Hours: 54 lecture

C-ID: MATH 250

Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4

**MATH B21 Special Projects in Mathematics**

1-2 units

Description: Individually directed work in mathematics in preparation for intercollegiate math competitions, including advanced topics, research projects, special problems and applications of mathematics to specific subject areas. Interested students should talk with their math instructors for an evaluation of their math skills. Field trips may be required.

Hours: 18 lecture hours for each unit (18-36)

Transferable: CSU and private colleges.

**MATH B22 Elementary Probability and Statistics**

4 units

Prerequisites: BC placement into math level 04 or successful completion of MATH B65 or MATH B70 or equivalent with a grade of C or better.

Description: Tabular, graphical, and numerical methods of summarizing data, finite probability, discrete and continuous random variables, binomial probability distribution, normal probability distribution, sampling distributions, point and interval estimation, one and two sample hypothesis testing procedures, analysis of variance, chi-square analysis, linear regression and correlation, and if time allows, nonparametric

methods.

Hours: 72 lecture

C-ID: MATH 110

Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4; BC GE B.2

### **MATH B23 Finite Mathematics**

3 units

Prerequisites: BC placement into math level 04 or successful completion of MATH B70 or equivalent with a grade of C or better.

Description: 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.

C-ID: MATH 130

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4; BC GE B.2

### **MATH B50 Modern College Arithmetic and Pre-Algebra**

4 units

Prerequisites: BC placement into math level 01.

Description: 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.

Hours: 72 lecture

Transferable: Not transferable. Not degree applicable.

### **MATH B60 Beginning Algebra**

5 units

Prerequisites: BC placement into math level 02 or successful completion of ACDV B72 or equivalent with a grade of C or better.

Description: Fundamental concepts and mathematical processes first degree equations, polynomials, special products and factoring, rational expressions and equations, ratios, proportions, exponents, graphs, simultaneous linear equations.

Hours: 90 lecture

Transferable: Not transferable. Not degree applicable.

### **MATH B65 Intermediate Algebra for Statistics**

4 units

Prerequisites: BC placement into math level 02 or successful completion of ACDV B72 or equivalent with a grade of C or better.

Description: An accelerated algebra course for non-STEM majors. Topics include simplifying algebraic expressions, manipulating and applying formulas, solving equations and inequalities in one and two variables, polynomials, and modeling with linear, exponential, and logarithmic functions.

Note: This course will only satisfy the prerequisite for MATH B22 and PSYC B5. This course should not be taken by Business majors and Elementary Teacher Education majors.

Hours: 54 lecture 54 lab

Transferable: Not transferable. Not degree applicable.

### **MATH B70 Intermediate Algebra**

5 units

Prerequisites: BC placement into math level 03 or successful completion of MATH B60 or equivalent with a grade of C or better.

Description: Topics for the course are functions and operations

on functions; system of linear equations, linear, and absolute value inequalities; linear, absolute value, and quadratic equations; radicals and operations with radicals; equations involving radicals, exponential, and logarithmic equations; and conic sections.

Hours: 90 lecture

Transferable: Not transferable. Degree applicable. BC GE B.2

## **MCAG - Mechanized Agriculture**

### **MCAG B2 Introduction to Mechanized Agriculture**

3 units

Description: This course covers basic mechanical skills in woodworking, cold metal, electricity, plumbing, concrete, and project construction skills as related to farm maintenance and repair. The use of hand and power tool skills as well as emphasis on safety practices for all mechanical areas are covered. A lab class is required.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges

### **MCAG B3 Small Gas Engines**

3 units

Description: This is a complete introductory course in the operation, construction, maintenance, repair, and adjustments of two-cycle and four-cycle engines. It is designed for persons without prior experience in small engines. Theory and practical work, including safety and the care and use of specialized tools used in small engine repair and maintenance, will be covered. Examples of the types of engines to be used will include lawn mower, power saw, pump, conveyor, self-propelled small carts, and any other small engines. Lab required.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

### **MCAG B4 Agriculture Safety**

3 units

Description: This course involves safety practices and principles, accident causation and prevention in the shop and in the field, as well as with tractors and machinery. Operation, service and normal safety practices common to farming will be stressed, including welding, hand tools, and chemical applicators. Material Safety Data Sheets, Personal Protective Equipment and on-site Worker safety will be explored. Supervised field operation and field trips will be required. Lab required.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

### **MCAG B5 Agriculture Irrigation Technology**

3 units

Description: An examination of agriculture irrigation systems, Irrigation and drainage problems relating to pumps, motors, sprinkler systems, structures, pipelines, ditches and wells; computation of costs and measurement of water; water law; basic principles of plant-soil-moisture relations, and water movement in soil. Field trips are required.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

**MCAG B10 Farm Power Operation**

3 units

Description: This course involves design principles, selection, maintenance, adjustment, and safe operation of wheel and track type tractors and commonly used equipment in agriculture and in the construction industry.

Hours: 36 lecture, 54 lab

C-ID: AG + MA 108L

Transferable: CSU and private colleges.

**MCAG B11 Farm Power Diesel Repair**

4 units

Recommended: Successful completion of MCAG B3 with a grade of C or better.

Description: This course explores the operation and repair of modern diesel engines. Principles and theories are studied by running, testing, diagnosing, disassembling and reassembling components, systems and engines.

Hours: 36 lecture, 108 lab

Transferable: CSU and private colleges.

**MCAG B48WE Occupational Work Experience Education**

1-8 units

Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.

Description: College credit for mechanized agricultural related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.

Hours: Non-paid 60 hours for each 1 unit (60 - 480). Paid 75 hours for each 1 unit (75 - 600).

Transferable: CSU and private colleges.

## MEDS - Medical Science Courses

**MEDS B35 Lifespan Development**

3 units

Recommended: BC placement into reading level 06.

Description: Study of normal human growth and development in prenatal, childhood, adolescent, adult and old age periods. Offers a balanced study of basic theories, research, applications; 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.

Hours: 54 lecture

C-ID: PSY 180

Transferable: CSU and private colleges; CSU GE E; BC GE E

**MEDS B52 Cardiopulmonary Resuscitation for Healthcare Providers**

0.5 unit

Description: An initial and 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 in the class will enable the students to recognize emergencies and how

to respond to them. At the end of the course, the students will qualify for an American Heart Association Healthcare Provider BLS card. Repeat: As needed for recertification. Note: In addition to the scheduled hours, students must arrange a total of 2 required class hours in which students must obtain materials from the college bookstore. Prior to the first class meeting student must read manual and view DVD.

Materials Fee: \$12.00

Hours: 9 lecture

Repeat: Unlimited, legally mandated training

Transferable: Not transferable. Degree applicable.

**MEDS B60 Medical Terminology**

3 units

Description: 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 lecture

Transferable: Not transferable. Degree applicable.

**MEDS B66 Intravenous Therapy and Blood Withdrawal**

2 units

Prerequisites: Enrollment in or completion of an Associate Degree or Vocational Nursing program.

Description: This course introduces the principles of intravenous therapy and blood withdrawal. The course is designed to enable the Licensed Vocational Nurse to safely initiate and maintain intravenous therapy and to perform blood withdrawal in a clinical setting. This course is approved by the Board of Vocational Nurses and Psychiatric Technicians and enrollment in or completion of an Associate Degree or Vocational Nursing Program is required.

Hours: 27 lecture, 27 lab

Transferable: Not transferable. Not degree applicable.

**MEDS B68 Home Health Aide**

1.5 units

Prerequisites: Successful completion of MEDS B69 with a grade of C or better.

Description: This course follows the California Department of Public Health (CDPH) guidelines and builds upon the foundation of the nurse assistant training. The course is designed to prepare students to work with clients in the home setting and includes a minimum of 20 hours in the clinical setting. Skills competencies will be assessed utilizing objective, measurable criteria. Upon completion of the course the student will be eligible for the State of California Home Health Aide certification.

Hours: 18 lecture, 27 lab

Transferable: Not transferable. Degree applicable.

**MEDS B69 Nurse Assistant**

6 units

Description: 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 lab experiences are provided with emphasis on providing basic nurse assistant care to residents in a long term care setting. Concepts presented in MEDS B69 are applied in the lab and clinical settings.

Materials Fee: \$69.00

Hours: 63 lecture, 135 lab

Transferable: Not transferable. Not degree applicable.

# MFGT - Manufacturing/ Machine Technology Courses

## MFGT B1AB Machine Tool Processes

3 units

Recommended: BC placement into reading level 06.

Description: An introduction to machine tool technology including the use of precision measuring instruments, drilling machines, saws, lathes, and vertical milling machines.

Note: Elective credit only.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

## MFGT B2 CNC Lathe Programming & Operation

3 units

Recommended: Successful completion of MFGT B1AB with a grade of C or better or evaluation by instructor of students machining skills and BC placement into reading level 06.

Description: Set-up, operation and programming of a computer numerical control lathe.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

## MFGT B3 CNC Mill Programming

3 units

Recommended: Successful completion of MFGT B1AB with a grade of C or better and BC placement into reading level 06.

Description: Programming, set-up, and operation of computer numerical control milling machines. G-code programming is emphasized along with the use of CAD/CAM software.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

## MFGT B48WE Occupational Work Experience Education

1-8 units

Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.

Description: College credit for Manufacturing Technology related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 hours per semester unit at paid work experience; 60 hours per semester unit volunteer work experience. Repetition allowed per Title 5 55253.

Hours: Non-paid 60 hours for each 1 unit (60-480). Paid 75 hours for each 1 unit (75-600).

Transferable: Not transferable

# MUSC - Music Courses

## MUSC B2 Basic Elements of Music

3 units

Description: Designed for the student with little or no previous experience in the reading and writing of music. Development of beginning skills in music notation and basic elements of music theory. Course also serves as pre-requisite for Music B4A Elementary Theory.

Hours: 54 lecture

C-ID: MUS 110

Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

## MUSC B4A Elementary Theory

3 units

Prerequisites: Successful completion of MUSC B2 or equivalent with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: A study of common practice harmony. Diatonic harmony including scales, key signatures, triad and seventh chord constructions and 4-part voice leading including phrase structure.

Hours: 54 lecture

C-ID: MUS 130

Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

## MUSC B4B Elementary Theory

3 units

Prerequisites: Successful completion of MUSC B4A or equivalent with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: A study of common practice harmony. Chromatic harmony from secondary dominants through augmented sixth chords including simple form analysis and modulation.

Hours: 54 lecture

C-ID: MUS 140

Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

## MUSC B4C Intermediate Theory-Contemporary Materials

3 units

Prerequisites: Successful completion of MUSC B4B or equivalent with a grade of C or better.

Corequisite: MUSC B15C must be taken concurrently.

Recommended: BC placement into reading level 06.

Description: 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. Note: Not open to students who have taken the equivalent course MUSC B4D. Formerly MUSC B4D.

Hours: 54 lecture

C-ID: MUS 150

Transferable: UC, CSU and private colleges

## MUSC B5A Class Piano

1 unit

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lab

Transferable: UC, CSU and private colleges; BC GE C.1

**MUSC B5B Class Piano**

1 unit

Prerequisites: Successful completion of MUSC B5A with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: 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.

Hours: 54 lab

Transferable: UC, CSU and private colleges; BC GE C.1

**MUSC B6A Class Voice**

1 unit

Recommended: Basic understanding of music fundamentals.

Description: Elementary solo vocal training. Emphasizes breath control, tone placement, posture, diction, and interpretive concepts.

Hours: 54 lab

Transferable: UC, CSU and private colleges; BC GE C.1

**MUSC B6B Class Voice**

1 unit

Prerequisites: Demonstration by audition of skill of at least MUSC B6A level.

Description: Solo voice training. Emphasizes repertoire and further technical development beyond the level of MUSC B6A.

Hours: 54 lab

Transferable: UC, CSU and private colleges; BC GE C.1

**MUSC B6C Class Voice**

1 unit

Prerequisites: Demonstration by audition of skill of at least MUSC B6B level.

Description: Solo voice training. Emphasizes repertoire and further technical development beyond the level of MUSC B6B.

Hours: 54 lab

Transferable: UC, CSU and private colleges

**MUSC B6D Class Voice**

1 unit

Prerequisites: Demonstration by audition of skill of at least MUSC B6C level.

Description: Solo vocal training. Emphasizes repertoire and further technical development beyond the level of MUSC B6C.

Hours: 54 lab

Transferable: UC, CSU and private colleges

**MUSC B7 Applied Music**

1 unit

Prerequisite: Enrollment open only to students who pass a qualifying audition.

Corequisites: Must be concurrently enrolled in a music ensemble (MUSC B10A, MUSC B12A, MUSC B13A or MUSC B14A) Must be concurrently enrolled in one of the following music theory/ear training course combinations or have completed the entire sequence with a grade of 'C' or better in each course: MUSC B2, MUSC B4A/B15A, MUSC B4B/B15B, or MUSC B4C/B15C.

Description: Individual and group instruction in solo performance for music majors culminating in a juried performance final. Includes instruction in technique, repertoire, and performance practice. Designed for students with significant prior experience/instruction with a particular instrument or singing.

Hours: 54 lab

Repeat: 3

C-ID: MUS 160

Transferable: UC, CSU and private colleges

**MUSC B9A Beginning Class Guitar**

1 unit

Description: 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.

Hours: 54 lab

Transferable: UC, CSU and private colleges; BC GE C.1

**MUSC B9B Intermediate Class Guitar**

1 unit

Prerequisites: Successful completion of MUSC B9A or equivalent with a grade of C better or demonstrated skill of at least MUSC B9A level as determined by the instructor.

Description: Intermediate techniques of guitar playing. Emphasizes advanced chord positions, scales, arpeggios, slurs, and bar chords. A suitable acoustic guitar required.

Hours: 54 lab

Transferable: UC, CSU and private colleges; BC GE C.1

**MUSC B10A Concert Band**

1 unit

Prerequisites: Audition required.

Description: Rehearsal and performance of standard band literature: Participation in public performances such as concerts, assemblies, and additional rehearsals is required. Field trips required.

Hours: 54 lab

Repeat: 3

C-ID: MUS 180

Transferable: UC, CSU and private colleges; BC GE C.1

**MUSC B12A College Orchestra**

1 unit

Prerequisites: Audition required.

Corequisite: MUSC B4C and MUSC B230C must be taken concurrently.

Description: Performance of standard works from the orchestra literature. An audition and field trips are required for this course.

Hours: 54 lab

Repeat: 3

C-ID: MUS 180

Transferable: UC, CSU and private colleges; BC GE C.1

**MUSC B13A Jazz Ensemble**

1 unit

Prerequisites: Audition required.

Recommended: BC placement into reading level 06.

Description: Practical experience working in various instrumental combinations and styles in the jazz tradition. Training in jazz literature, phrasing, ensemble playing, musicality, and creative improvisation leading to public performances on and off campus.

Hours: 54 lab

Repeat: 3

C-ID: MUS 180

Transferable: UC, CSU and private colleges; BC GE C.1

**MUSC B14A College Choir**

1.5 units

Prerequisites: Audition required.

Description: Study of major choral literature of all the historical periods. Public performance required for credit. Field trips for performances are required.

Hours: 81 lab

Repeat: 3

C-ID: MUS 180

Transferable: UC, CSU and private colleges; BC GE C.1

**MUSC B15A Ear Training and Sight Singing**

1 unit

Corequisite: MUSC B4A and MUSC B230A.

Description: Drill in the singing and recognition of intervals, scales, and melodies with solfège syllables using moveable do. Practice in rhythmic, harmonic, and melodic dictation. Practice in conducting and performing rhythms.

Hours: 54 lab

C-ID: MUS 135

Transferable: UC, CSU and private colleges

**MUSC B15B Ear Training and Sight Singing**

1 unit

Prerequisites: Successful completion of MUSC B15A or equivalent with a grade of C or better.

Corequisite: Concurrent enrollment in MUSC B4B and MUSC B230B.

Description: This course applies and develops the rhythmic, melodic, and harmonic materials of MUSC B4B Elementary Theory through ear training, sight singing, analysis, and dictation.

Hours: 54 lab

C-ID: MUS 145

Transferable: UC, CSU and private colleges

**MUSC B15C Intermediate Ear Training and Sight Singing**

1 unit

Prerequisites: Successful completion of MUSC B15B with a grade of C or better.

Corequisite: MUSC B4C and MUSC B230C must be taken concurrently.

Description: Aural skill training in chromatic, post-tonal, and jazz oriented materials including exercises in singing, rhythm performance/conducting, keyboard, dictation (melodic, rhythmic, and harmonic), and scale/mode/chord aural recognition.

C-ID: MUS 155

Hours: 54 lab

Transferable: UC, CSU and private colleges

**MUSC B17A Chamber Singers**

1.5 units

Prerequisites: Audition required.

Description: A select choral group, specializing in rehearsal and performance of all choral literature for all historical periods. Public performance required for credit. Field trips for performances are required.

Hours: 81 lab

Repeat: 3

C-ID: MUS 180

Transferable: UC, CSU and private colleges; BC GE C.1

**MUSC B18A Drum Line**

1-3 units

Prerequisites: Audition required.

Description: Rehearsal and performance of drum line literature suitable for field, parade, and competition. Field trips and performances are required.

NOTE: 54 hours of lab for each unit of credit. MUSC B18A has a limit of 3 repeats.

Hours: 54 lab hours for each 1 unit (54-162)

Repeat: 3

Transferable: UC, CSU and private colleges

**MUSC B21A History of Music**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

**MUSC B21B History of Music**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Historical survey of western art music from the music of Beethoven to the present. Uses recorded music and musical scores to study changing musical styles.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

**MUSC B22 Music Appreciation**

3 units

Recommended: BC placement into reading level 06.

Description: Introduction to appreciation of music with an emphasis on Western art music: historical development is surveyed with recordings, videos, multi-media computer presentations, and live performances as illustrations for directed listening as a basis for appreciation.

Hours: 54 lecture

C-ID: MUS 100

Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

**MUSC B23 Appreciation of Jazz**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Comparative survey of jazz styles, musicians, and representative works. Students learn core musical concepts, engage in directed listening activities, attend live concerts, and discuss the various theoretical, aesthetic, and philosophical ideas that inspire the creation of jazz music.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

**MUSC B24 A Survey of World Music**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: An introductory course surveying the dominant musical cultures of the new and non-western world with comparisons to European/western music. Emphasizes listening to and participation in world music through lecture, films, recording, live presentations, and class performance.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.1; BC GE C.1

**MUSC B27 History of Rock and Roll**

3 units

Recommended: BC placement into reading level 06.

Description: Introduction to the historical and stylistic developments of rock music, with emphasis on its social, economic and political consequences.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

**MUSC B28 Drum and Bugle Corps**

2 units

Prerequisites: Audition required.

Description: Rehearsal and performance of drum corps literature suitable for field, parade, and competition. Field trips and performances required.

Hours: 108 lab

Repeat: 3

Transferable: CSU and private colleges.

**MUSC B30 Introduction to Music Technology**

3 units

Recommended: BC placement into reading level 06.

Description: This course introduces the basics of how technology and music interact. There will be an emphasis on audio software and hardware, basic principles of sound, digital audio workstations, MIDI, synthesis, and sequencing. Particular attention will be paid toward making connections between analog and digital technological contexts. Lab activity consists of self-directed projects which make use of software and hardware found in the typical digital audio studio.

Hours: 54 lecture

Repeat: 3

Transferable: CSU and private colleges.

**MUSC B31 Commercial Music Composition**

3 units

Recommended: BC placement into reading level 06.

Description: This course explores the process of songwriting and commercial music composition. Songs and compositions will be analyzed on chord structure, form, rhythm, melody, harmony, and lyrics. Original compositions and performances are expected from all students. Emphasis on the development of musical and lyrical skills. Students will analyze harmonic, melodic, and rhythmic components of popular songs from a range of genres. Emphasis will be placed on relevant repertoire and the composition and performance of original material. Additional emphasis on commercial music composition for multimedia applications (jingles, production music, soundtracks). Includes use of basic recording technology useful for the contemporary songwriter.

Hours: 54 lecture

Transferable: CSU and private colleges.

**MUSC B32 Sound Design and Synthesis**

3 units

Prerequisites: Successful completion of MUSC B30 with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: This course introduces and builds up properties of sound and how it functions acoustically and electronically. There will be an emphasis on digital and analog synthesis, sampling, MIDI sequencing, film sound design, and other multimedia applications. Crucial to this exploration are considerations of the widespread use of sound synthesis and design in entertainment industry. The course culminates with a sound design reel and portfolio consisting of original electronic music compositions, multimedia applications, and sound design treatments.

Hours: 36 lecture 54 lab

Transferable: CSU and private colleges.

**MUSC B33 Live Sound**

3 units

Prerequisites: Successful completion of MUSC B30 with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: Introduction to live sound systems and aspects of reinforcement and acoustical design. Emphasis on components and function of live sound systems including microphones, mixers, effects, power amplifiers, and speaker systems. Focus on setup, operation, maintenance, safety, health, and other workplace issue. Student will gain hands-on experience at local venues and/or events with opportunities to troubleshoot, sound check, and mix in live sound situations.

Hours: 54 lecture

Transferable: CSU and private colleges.

**MUSC B34 Recording Techniques I**

3 units

Prerequisites: Successful completion of MUSC B30 with a grade of C or better.

Description: This course covers the fundamental aspects of work in the modern recording studio. Emphasis on commonalities between project and professional studio contexts. Topics include microphone technique, recording consoles, signal chain, signal processors, patchbays, monitoring, mastering, producing, and synchronization.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

**MUSC B35 Recording Techniques II**

3 units

Recommended: Successful completion of MUSC B30 and B34 with a grade of C or better, and BC placement into reading level 06.

Description: This course builds upon the fundamental aspects covered in Recording Techniques I. Emphasis on mixing, mastering, advanced automation techniques, production techniques, film sound synchronization.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

**MUSC B36 Music Business**

3 units

Recommended: BC placement into reading level 06.

Description: An overview of the music industry including publishing, music merchandising, contracts and licenses, retail concerns, and live entertainment. Additional examination of duties and responsibilities of producers, agents, managers, promoters, and performing artists. Emphasis on new media marketing and exposure to diverse careers and streams of income within industry. Students build portfolio in preparation for career in music industry.

Hours: 54 lecture

Transferable: CSU and private colleges.

**MUSC B37 Commercial Music Ensemble**

1 unit

Prerequisite: Audition required.

Description: Participation in small ensemble concentrating on popular styles, improvisation, and other aspects of commercial music performance.

Hours: 54 activity

Repeat: 3

Transferable: CSU and private colleges; BC GE C1

**MUSC B40 Renegade Marching Band**

2 units

Prerequisites: Previous experience in a marching band or similar ensemble required.

Description: Rehearsal and performance of marching band literature suitable for field, parade, and competition. Field trips and performances may be required.

Hours: 108 lab

Repeat: 3

Transferable: Not transferable. Degree applicable.

**MUSC B54A College Chorale**

1 unit

Prerequisite: Previous experience in a choral group and demonstrated proficiency.

Recommended: BC placement into reading level 06.

Description: 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. Field trips for performances are required.

Hours: 54 lab

Repeat: 3

Transferable: Not transferable. Not degree applicable.

**MUSC B230A Music Lab**

0.5 unit

Description: A computer-based, positive attendance course featuring self-pacing programmed system instruction in one of two self-directed music technology areas: reading, transcribing, 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

Transferable: Not transferable. Not degree applicable.

**MUSC B230B Music Lab**

0.5 unit

Description: A computer-based, positive attendance course featuring self-pacing programmed system instruction in one of

two self-directed music technology areas: reading, transcribing, 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

Transferable: Not transferable. Not degree applicable.

**MUSC B230C Music Lab**

0.5 unit

Description: A computer-based, positive attendance course featuring self-pacing programmed system instruction in one of two self-directed music technology areas: reading, transcribing, 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

Transferable: Not transferable. Not degree applicable.

## NRES - Natural Resources Management Courses

**NRES B1 Range Management**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Basic range management and improvement practices. Proper utilization of rangeland resources. Overview of multiple use principles. Maintenance and improvement of range plant communities. Field trips required.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

**NRES B2 Parks and Outdoor Recreation**

3 units

Description: An exploration of national, state, county, city, and private park systems. An overview of the history, philosophy, policy and principles of the formation, administration and functioning of recreational facilities and their impact on America. Field trips may be required.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

## NURS - Registered Nursing Courses

**NURS B20 Fundamentals of Nursing**

4 units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

Description: 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.  
Hours: 36 lecture, 108 lab  
Transferable: CSU and private colleges.

### **NURS B21 Medical Surgical Nursing 1**

5 units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program

Description: 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.  
Materials Fee: \$24.00  
Hours: 45 lecture, 135 lab  
Transferable: CSU and private colleges.

### **NURS B22 Pharmacology**

3 units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

Description: This Level 1 course provides the foundation knowledge base related to pharmacology in nursing, including both theoretical and mathematical aspects. 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.  
Hours: 54 lecture  
Transferable: CSU and private colleges.

### **NURS B23 Medical Surgical Nursing 2**

4.5 units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program

Description: 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.  
Materials Fee: \$24.00  
Hours: 45 lecture, 108 lab  
Transferable: CSU and private colleges.

### **NURS B24 Obstetrics - Maternity Nursing**

3 units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

Description: 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.  
Hours: 27 lecture, 81 lab  
Transferable: CSU and private colleges.

### **NURS B25 Mental Health Psychiatric Nursing**

3.5 units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

Description: 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.  
Hours: 36 lecture, 81 lab  
Transferable: CSU and private colleges.

### **NURS B26 Medical Surgical Nursing 3**

5.5 units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

Description: 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.  
Materials Fee: \$24.00  
Hours: 45 lecture, 162 lab  
Transferable: CSU and private colleges.

### **NURS B27 Pediatric Nursing**

3.5 units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

Description: 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.

Hours: 27 lecture, 108 lab

Transferable: CSU and private colleges.

#### **NURS B28 Medical Surgical Nursing 4**

7 units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

Description: 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 Profession are integrated to promote success in transitioning from student to entry level Registered Nurse.

Materials Fee: \$24.00

Hours: 54 lecture, 216 lab

Transferable: CSU and private colleges.

#### **NURS B29 Gerontology - Community Nursing**

2 units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

Description: 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 individuals response to teaching/learning. Correlated clinical experiences will emphasize the application of interventions that will increase the older adults functional ability. The roles of Provider of Care, Manager of Care, and Member of Profession are integrated throughout the didactic and clinical experiences.

Hours: 18 lecture, 54 lab

Transferable: CSU and private colleges.

#### **NURS B40 Foundations of Nursing Practice**

4.5 Units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

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. Limitation on Enrollment: Admission to the Associate Degree Nursing Program and appropriate standing in the Nursing Program.

Hours: 45 lecture, 108 lab

Transferable: CSU and private colleges.

#### **NURS B41 Nursing Care of the Medical Surgical Patient 1**

4 Units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

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.

Materials Fee: \$24.00

Hours: 36 lecture, 108 lab

Transferable: CSU and private colleges.

#### **NURS B42 Pharmacology for Nursing Practice**

3 Units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

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.

Hours: 54 lecture

Transferable: CSU and private colleges.

#### **NURS B43 Nursing Care of the Medical Surgical Patient 2**

5.5 Units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

Description: 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.

Materials Fee: \$24.00

Hours: 45 lecture, 162 lab

Transferable: CSU and private colleges.

#### **NURS B44 Nursing Care of the Psychiatric-Mental Health Client**

3 Units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

Description: 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.  
Hours: 27 lecture, 81 lab  
Transferable: CSU and private colleges.

### **NURS B45 Transition to Registered Nursing**

2 Units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

Description: This Level 3 course 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.

Hours: 27 lecture, 27 lab

Transferable: CSU and private colleges.

### **NURS B46 Nursing Care of the Medical Surgical Patient 3**

5 Units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

Description: This level 3 course focuses on the application of previously learned knowledge as well as the development of more in-depth knowledge for adult patients 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.

Materials Fee: \$24.00

Hours: 45 lecture, 135 lab

Transferable: CSU and private colleges.

### **NURS B47 Nursing Care of Maternal Newborn Patients**

3 Units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

Description: This Level 3 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.

Hours: 27 lecture, 81 lab

Transferable: CSU and private colleges.

### **NURS B48 Nursing Care of Children and Adolescents**

3 Units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

Description: This Level 3 course provides a foundation for Nursing Care of Children and Adolescents 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. Admission to the Associate Degree Nursing Program and appropriate standing in the Nursing Program are required.

Hours: 27 lecture, 81 lab

Transferable: CSU and private colleges.

### **NURS B48WE Occupational Work Experience Education**

1-8 units

Prerequisite: Declared major or occupational goal and evaluation of student's qualifications and objectives.

Description: College credit for registered nursing related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.

Hours: Non-paid 60 hours for each 1 unit (60 - 480). Paid 75 hours for each 1 unit (75 - 600).

Transferable: CSU and private colleges.

### **NURS B49 Nursing Care of the Medical Surgical Patient 4**

7 Units

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

Description: This Level 4 capstone course focuses on the integration of knowledge and skills, though analysis and synthesis. The nursing process is used as the framework for providing nursing care to patients 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 Profession are integrated to promote success in transitioning from student to entry level Registered Nurse.

Materials Fee: \$24.00

Hours: 45 lecture, 243 lab

Transferable: CSU and private colleges.

### **NURS B70 Role Transition: Bridging Nursing Theory to Practice**

2 units

Prerequisites: LVN or RN licensure and Limitation on Enrollment, Appropriate standing in the Associate Degree Nursing Program.

Description: Prerequisite: LVN or RN licensure. 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. Hours: 27 lecture, 27 lab  
Transferable: Not transferable. Degree applicable.

### **NURS B100 Strategies for Success in a Nursing Program**

2 units

Description: Designed to prepare students for successful completion of the nursing program. The students 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. Students 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 lecture

Transferable: Not transferable. Degree applicable.

### **NURS B201A Learning Lab**

1 unit

Prerequisites: Enrollment into the ADN or LVN program or nursing student with evaluation of skills and knowledge by the ADN Program Director.

Description: An on-campus lab 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 guidelines 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.

Note: Offered credit/no credit grading only. Open entry/open exit. Formerly NURS B201L.

Hours: 54 lab

Transferable: Not transferable. Not degree applicable.

### **NURS B201B Learning Lab**

1 unit

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

Description: An on-campus lab designed for self-paced practice and mastery of nursing skills necessary for providing safe client care throughout the program. This level two course builds upon content from level one curriculum and provides instructional guidance to assist students in refining newly acquired skills and to develop the expected competencies for level two students.

Note: open entry/open exit

Hours: 54 lab

Transferable: Not transferable. Not degree applicable.

### **NURS B201C Learning Lab**

1 unit

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

Description: An on-campus lab designed for self-paced practice and mastery of nursing skills necessary for providing safe client care throughout the program. This level three course builds upon

content from level two curriculum and provides instructional guidance to assist students to refine newly acquired skills and develop the expected competencies for level two students.

Note: open entry/open exit

Hours: 54 lab

Transferable: Not transferable. Not degree applicable.

### **NURS B201D Learning Lab**

1 unit

Prerequisites: Appropriate standing in the Associate Degree Nursing Program.

Description: An on-campus lab designed for self-paced practice and mastery of nursing skills necessary for providing safe client care throughout the program. This level four course builds upon content from all previous levels of the curriculum and provides instructional guidance to assist students to refine newly acquired skills and develop the competency level expected of entry level nurses.

Note: open entry/open exit

Hours: 54 lab

Transferable: Not transferable. Not degree applicable.

## **NUTR - Nutrition Courses**

### **NUTR B10 Elementary Nutrition**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Basic concepts and principles of nutrition with application to current nutrition issues. Emphasizes improvement of personal health through proper eating habits.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

### **NUTR B50 Modified Diets**

2 units

Prerequisites: Successful completion of NUTR B10 or equivalent with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: Nutrition care for acute illnesses and chronic diseases. Related normal and abnormal physiology, nutrition assessment and care plans and client education techniques are emphasized. Field trips may be required.

Hours: 36 lecture

Transferable: Not transferable. Degree applicable.

## **ORNH - Ornamental Horticulture Courses**

### **ORNH B1 Introduction to Ornamental Horticulture**

3 units

Description: General course in environmental horticulture with emphasis on nursery operations, landscaping, turf management, and floral industries including: basic botany, cultural practices, propagation, structures and layout, pest management, planting, container gardening and houseplants, floral design, plant identification, turf grass installation and care, and survey of

career opportunities. Lab required. Field trips required.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

### **ORNH B2 Fundamentals of Nursery Management and Plant Production**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: This is an introductory class in nursery business operations, skills, and processes appropriate to the horticulture industry in California. Emphasis will be placed upon laws/regulations, record keeping, budgeting, computer skills, professional organizations, cooperatives, merchandising, salesmanship, and communications. Propagation media, nursery designs, propagation, structures, seedage, cuttage, plant structure, rooting aids, transplanting, stepping up, and potting will be covered.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

### **ORNH B3 Landscape Installation and Maintenance**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Enhancing the function and aesthetic value of public and private landscapes by applying appropriate installation and maintenance techniques in Kern County and California. Topics include; sustainability, planting, pruning, watering, soil fertility, pest management, weed control, and landscape maintenance business practices. Lab required.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

### **ORNH B4 Plant Propagation**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Principles of sexual propagation, seedage, and asexual propagation, budding, grafting, cuttings, layering, division and separation. Principles of tissue culture.

Hours: 36 lecture, 54 lab

C-ID: AG+EH 116

Transferable: CSU and private colleges.

### **ORNH B6 Ornamental Plant Identification-Ground Covers, Vines, and Dwarf Shrubs**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Identification, habits of growth, culture and landscape use of dwarf shrubs, vines, ground covers, annuals, and seasonal plants, adapted to the Central Valley of California and the surrounding regions. Covers those plants best observed and studied in the fall of the year. Plant materials from local regions will also be included. Plants emphasized will come from the current California Association of Nurseries & Garden Centers (CANGC) and Professional Landcare Network (PLANET) Certification Tests Plant Lists. Lab required. Field trips required.

Hours: 36 lecture, 54 lab

C-ID: AG+EH 108

Transferable: UC, CSU and private colleges

### **ORNH B7 Ornamental Plant Identification-Large Shrubs, Small Trees, Large Trees, and Palms**

3 units

Description: Identification, habits of growth, culture and landscape use of large shrubs, small trees, large trees and palms adapted to the Central Valley of California and the surrounding mountains. Field trips required.

Hours: 36 lecture, 54 lab

C-ID: AG+EH 112

Transferable: UC, CSU and private colleges

### **ORNH B8 Introduction to Landscape Design**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: The study and implementation of the art and science of landscape design, including principles of design, the design process, drafting, graphics, and presentation methods. Project emphasis is placed upon residential and small commercial sites. Course includes introduction to computer landscape design software programs. Lab required.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

### **ORNH B36 Beginning Floral Design**

3 units

Recommended: BC placement into reading level 06.

Description: 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 florist 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.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges; BC GE C.1

### **ORNH B48WE Occupational Work Experience Education**

1-8 units

Recommended: Declared major or occupational goal and evaluation of student's qualifications and objectives.

Description: College credit for ornamental horticultural related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.

Hours: Non-paid 60 hours for each 1 unit (60 - 480). Paid 75 hours for each 1 unit (75 - 600).

Transferable: CSU and private colleges.

# OSRM - Occupational Safety and Risk Management Courses

## OSRM B10 Occupational Safety

3 Units

Description: This course explores the theories and principles of occupational safety with emphasis on the evaluation and control of workplace safety hazards including physical and mechanical hazards and their associated regulatory framework. Risk identification and hazard assessment provide a foundation for determining best practices for controlling unsafe conditions and practices. Topics include accident causation, accident investigation, job safety analysis, facility safety and inspection, machine guarding, enclosed and confined spaces, forklifts and industrial trucks, workplace violence, and the role of personal protective equipment.

Hours: 54 lecture

Transferable: Not transferable, Degree applicability pending.

## OSRM B12 Occupational Health

3 Units

Description: Exploration of the concepts of occupational health as they pertain to appraising and controlling health hazards and occupational diseases. Specific chemical, biological, and physical agents found in the workplace, and their applicable regulatory standard, will be discussed including bloodborne pathogens, ergonomics and human factors engineering, indoor air quality, mold, noise, heat illness, health effects of pesticides, and others. Discussion of techniques for recognition, evaluation, prevention and control of occupational health hazards.

Hours: 54 lecture

Transferable: Not transferable, Degree applicability pending.

## OSRM B16 Managing Employee Safety and Health

3 Units

Description: An examination of the fundamental elements of managing an occupational safety and health program. This course includes discussion of the legal aspects and regulatory framework for managing work-related injuries, cause and control of occupational loss, medical surveillance programs including commercial drivers, occupational drug and alcohol testing programs and requirements, disability discrimination parameters and reasonable accommodation. Application of a work management matrix outlining the major phases of employment including pre-employment identification of essential functions and job hazards will also be discussed.

Hours: 54 lecture

Transferable: Not transferable, Degree applicability pending.

## OSRM B18 Occupational Regulations and Regulators

3 Units

Description: Overview of the state and local regulatory agencies involved in occupational safety and health and the scope of their jurisdiction, subject matter, and enforcement structure.

Legal aspects including the employer's responsibilities, employee rights, and citation/fine applicability will be explored. Special emphasis on the Cal/OSHA regulatory framework and enforcement. The following additional agencies will also be discussed: California Department of Industrial Relations; California Department of Pesticide Regulation; California Department of Toxic Substances Control; Division of Oil, Gas, and

Geothermal Resources; and others. Local regulatory agencies and their role/jurisdiction will also be addressed.

Hours: 54 lecture

Transferable: Not transferable, Degree applicability pending.

# PBHS - Public Health

## PBHS B20 Introduction to Public Health

3 units

Description: This course provides an introduction to the discipline of Public Health. Students will gain an understanding of the basic concepts and terminologies of public health, as well as the history and accomplishments of public health officials and agencies. The course will provide an overview of the functions of various public health professions and institutions, and an in-depth examination of the core public health disciplines. Topics will include epidemiology of infectious and chronic disease; prevention and control of diseases in the community including the analysis of the social determinants of health and strategies for eliminating disease; illness and health disparities among various populations; community organizing and health promotion programming; environmental health and safety; global health; and healthcare policy and management.

C-ID: PHS 101

Hours: 54 lecture

Transferable: CSU and private colleges.

## PBHS B21 Personal Health and Wellness

3 units

Description: This course focuses on the exploration of major public health issues and behaviors within the dimensions of health. Emphasis is placed on individual responsibility for personal health and the promotion of informed, positive health behaviors with a focus on community wellness and behavioral change. Topics include nutrition, exercise, weight control, mental health, stress management, violence, substance abuse, reproductive health, disease prevention, aging, healthcare, and environmental hazards and safety.

C-ID: PHS 100

Hours: 54 lecture

Transferable: CSU and private colleges.

## PBHS B22 Drugs, Health, and Society

3 units

Description: This course provides an overview of the epidemiology and toxicology of substance abuse and its relevance to personal and public health. Students will be introduced to the concept of substance abuse and dependence, the definition of licit and illicit drugs, and the pharmacologic, neurologic and physiologic effects of selected substances on the human brain. The course will explore and discuss the political, social and economic factors involved in the supply and demand for drugs. The course will cover epidemiologic data on the prevalence, incidence, and trends of smoking, alcohol, prescription and other drug dependencies in the U.S. as well as risk factors associated with the use and abuse of these substances. Coursework will include a survey of current options for drug addiction recovery, as well as, available resources to support prevention and intervention of drug addiction.

C-ID: PHS 103

Hours: 54 lecture

Transferable: CSU and private colleges.

### **PBHS B23 Health and Social Justice**

3 units

Prerequisites: BC placement into reading level 06 or writing level 06 or successful completion of ENGL B50 or ACDV B50 or equivalent with a grade of C or better.

Description: This course provides an introduction to the health inequities in the United States that stem from unequal living and health conditions. Students will explore how education, socioeconomic status, racism and gender shape health epidemics and policy development. The course will provide the basic skills necessary for advocating for health and social justice, as well as provide the theoretical concepts on health disparities and the relationship with social justice.

C-ID: PHS 102

Hours: 54 lecture

Transferable: CSU and private colleges.

## **PHED - Physical Education Courses**

### **PHED B1A Educational Planning for College Athletes**

1 unit

Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.

Description: Designed to assist student athletes in understanding college matriculation, educational plans, and collegiate transfer requirements. Satisfies the 0.5 unit educational planning requirement for graduation from Bakersfield College.

Hours: 18 lecture

Transferable: Associate Degree Only. Not transferable.

### **PHED B2SB Aquatics: Beginning Swimming**

1 unit

Description: A semester course in beginning swimming in which the focus is on the knowledge and skill necessary to handle the body with ease in the water. The course covers basic mechanical, physiological and psychological concepts, fundamental safety skills and basic swimming strokes for the 4 competitive swimming strokes. (Free, Back, Breast, Fly)

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 54 lab

Transferable: UC, CSU and private colleges; BC GE E

### **PHED B3ADP Adaptive Physical Education**

1 unit

Description: Individualized fitness class for the physically challenged (as verified by D.S.P.S.) with activities designed to emphasize resistive circuit training combined, when possible, with aerobic training.

Note: Students who are physically challenged may contact DSPS to determine if they qualify to enroll in the course again. Justification must be documented by a DSPS counselor.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 54 lab

Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

### **PHED B6A Coeducational and Individual Activity: Archery**

1 unit

Description: Archery as a lifelong physiological and social activity. An elementary course in archery to include target archery and field archery.

Note: UC campuses give a maximum of four semester units of credit for appropriate Physical Education activity courses.

Hours: 54 lab

Transferable: UC, CSU and private colleges; BC GE E

### **PHED B6BB Coeducational and Individual Activity: Basketball**

1 unit

Description: Basketball as a lifelong physiological, psychological and social activity. Skills, strategies, rules and etiquette of basketball.

Note: UC campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 54 lab

Transferable: UC, CSU and private colleges; BC GE E

### **PHED B6BLB Coeducational and Individual Activity: Beginning Ballet (DANC B6BLB)**

1 unit

Description: Co-educational beginning ballet course. Includes warm-up exercises, technical skills and terminology.

Note: Not open to students who have completed DANC B6BLB.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 54 lab

Transferable: UC, CSU and private colleges; BC GE E

### **PHED B6FCX Coeducational and Individual Activity: Fitness Center**

1 unit

Description: Circuit training with resistance machines (weights), supplemented with a variety of aerobic based equipment. Stresses the development of muscle mass/tone, endurance and cardiovascular fitness. Not recommended for competitive weight lifters.

Note: UC campuses give a maximum of four semester units of credit for appropriate Physical Education activity courses.

Hours: 54 lab

Transferable: UC, CSU and private colleges; BC GE E

### **PHED B6G Coeducational and Individual Activity: Golf**

1 unit

Description: This course includes instruction in technique, tactics, and physical conditioning related to the sport of golf.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 54 lab

Transferable: UC, CSU and private colleges; BC GE E

### **PHED B6JD Coeducational Team and Individual Activity: Jazz Dance (DANC B6JD)**

1 unit

Description: 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. Note: Not open to students who have completed DANC B6JD.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 54 lab

Transferable: UC, CSU and private colleges; BC GE E

**PHED B6SC Coeducational and Individual Activity: Soccer**

1 unit

Description: Soccer as a lifelong physiological, psychological and social activity. Training in the fundamental skills of soccer. Understanding of the rules of the game, safety and basic strategy of play.

Note: UC campuses give a maximum of four semester units of credit for appropriate Physical Education activity courses.

Hours: 54 lab

Transferable: UC, CSU and private colleges; BC GE E

**PHED B6T Coeducational and Individual Activity: Tennis**

1 unit

Description: Tennis as a lifelong physiological, psychological and social activity. Student will learn basic tennis skills, rules, strategies and etiquette.

Note: UC campuses give a maximum of four semester units of credit for appropriate Physical Education activity courses.

Hours: 54 lab

Transferable: UC, CSU and private colleges; BC GE E

**PHED B6V Coeducational and Individual Activity: Beginning Volleyball**

1 unit

Description: An elementary course in volleyball to include instruction in techniques, tactics, and physical conditioning related to the sport of volleyball.

Note: UC campuses give a maximum of four semester units of credit for appropriate Physical Education activity courses.

Hours: 54 lab

Transferable: UC, CSU and private colleges; BC GE E

**PHED B6WT Coeducational and Individual Activity: Weight Training**

1 unit

Description: Coeducational course stressing correct application of weight training principles used with "free weights." Instruction in the correct and safe use of "free weights" to develop strength, endurance and general conditioning.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 54 lab

Repeat: 1

Transferable: UC, CSU and private colleges; BC GE E

**Athletic Code Eligibility Requirements**

**An athlete must be continuously enrolled in a minimum of 12 units during the season of competition. Students 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.**

**NOTE: All intercollegiate sports 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.**

**PHED B10 Intercollegiate Competition for Men: Football**

3 units

Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.

Description: Intercollegiate competition for Men's Football team. Student must meet athletic code eligibility requirements. Field trips may be required.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 162 lab

Repeat: 3

Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

**PHED B11 Intercollegiate Competition for Men: Basketball**

1.5 units

Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.

Description: Intercollegiate competition for Men's Basketball team. Student must meet athletic code eligibility requirements. Field trips may be required.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 81 lab

Repeat: 3

Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

**PHED B12 Intercollegiate Competition: Track and Field**

3 units

Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.

Description: Intercollegiate competition for the Track and Field team. Student must meet athletic code eligibility requirements. Field trips may be required.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 162 lab

Repeat: 3

Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

**PHED B13 Intercollegiate Competition for Men: Tennis**

3 units

Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.

Description: Intercollegiate competition for Men's Tennis team. Student must meet athletic code eligibility requirements. Field trips may be required.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 162 lab

Repeat: 3

Transferable: UC, CSU and private colleges; CSU GE E; BC GE E



**PHED B14 Intercollegiate Competition for Men: Baseball**

3 units

Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.

Description: Intercollegiate competition for Men's Baseball team. Student must meet athletic code eligibility requirements. Field trips may be required.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 162 lab

Repeat: 3

Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

**PHED B15 Intercollegiate Competition Cheer**

1 units

Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.

Description: Practice, participation and competition on cheer, dance and stunt teams for Bakersfield College. Includes development of skills, both individual and group, for successful public performance. Field trips may be required.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 36 lab

Repeat: 3

Transferable: Not transferable.

**PHED B16 Intercollegiate Competition for Men: Golf**

3 units

Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.

Description: Intercollegiate competition for Men's Golf team. Student must meet athletic code eligibility requirements. Field trips may be required.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 162 lab

Repeat: 3

Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

**PHED B17 Intercollegiate Competition Cross Country**

3 units

Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.

Description: Intercollegiate competition for the Cross Country team. Student must meet athletic code eligibility requirements. Field trips may be required.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 162 lab

Repeat: 3

Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

**PHED B20 Intercollegiate Competition for Men Wrestling**

3 units

Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.

Description: Intercollegiate competition for Men's Wrestling team. Student must meet athletic code eligibility requirements. Field trips may be required. UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 162 lab

Repeat: 3

Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

**PHED B23 Intercollegiate Competition for Women Soccer**

3 units

Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.

Description: Intercollegiate competition for Women's Soccer team. Student must meet athletic code eligibility requirements. Field trips may be required.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 162 lab

Repeat: 3

Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

**PHED B23M Intercollegiate Competition for Men Soccer**

3 units

Prerequisite: Limitation on Enrollment: Student must meet athletic code eligibility requirements.

Description: Intercollegiate competition for Men's Soccer team. Student must meet athletic code eligibility requirements. Field trips may be required.

Note: UC campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 162 lab

Repeat: 3

Transferable: Pending transferability. BC GE E

**PHED B24 Intercollegiate Competition for Women: Golf**

3 units

Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.

Description: Intercollegiate competition for Women's Golf team. Student must meet athletic code eligibility requirements. Field trips may be required.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 162 lab

Repeat: 3

Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

**PHED B25 Intercollegiate Competition for Women Volleyball**

3 units

Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.

Description: Intercollegiate competition for Women's Volleyball team. Student must meet athletic code eligibility requirements. Field trips may be required. UC campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 162 lab

Repeat: 3

Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

**PHED B25B Intercollegiate Competition for Women Beach Volleyball**

3 units

Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.

Description: Intercollegiate competition for Women's Beach Volleyball. Student must meet athletic code eligibility requirements. Field trips may be required. UC Campuses give a maximum of four semester units credits for Physical Education activity units.

Hours: 162 lab

Repeat: 3

Transferable: Pending transferability. BC GE E

**PHED B28 Intercollegiate Competition for Women: Basketball**

1.5 units

Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.

Description: Intercollegiate competition for Women's Basketball team. Student must meet athletic code eligibility requirements. Field trips may be required.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 81 lab

Repeat: 3

Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

**PHED B29 Intercollegiate Competition for Women Softball**

3 units

Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.

Description: Intercollegiate competition for Women's Softball team. Student must meet athletic code eligibility requirements. Field trips may be required.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 162 lab

Repeat: 3

Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

**PHED B32 Shape Up**

3 units

Description: 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 benefits of exercise, nutrition, socialization and individual differences in human behavior.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 18 lecture, 108 lab

Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

**PHED B33 Intercollegiate Swimming**

3 units

Prerequisite: Limitation on Enrollment, Must meet athletic code eligibility requirement

Description: Intercollegiate competition for Swimming. Student must meet athletic code eligibility requirements. Field trips may be required.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 162 lab

Repeat: 3

Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

**PHED B34C Intercollegiate Conditioning**

1 unit

Description: Intercollegiate athletics course emphasizing preseason conditioning. Enrollment is limited to athletic team candidates and includes, sport specific aerobic and anaerobic conditioning, drill technique, strength conditioning, speed development and game play. Students who repeat this course will improve skills and fitness through further instruction and practice.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 54 lab

Repeat: 3

Transferable: UC, CSU and private colleges.

**PHED B34WT Intercollegiate Weight Training**

0.5-2 units

Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.

Description: Intercollegiate athletics course emphasizing weight training. Enrollment is limited to athletic team candidates and includes, sport specific aerobic and anaerobic weight training, appropriate technique, strength conditioning, speed development and explosive exercises. Students who repeat this course will improve strength, flexibility, and fitness through detailed instruction and practice.

Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.

Hours: 81 lab

Repeat: 3

Transferable: UC, CSU and private colleges

**PHED B36 First Aid and CPR**

3 units

Recommended: BC placement into reading level 06.

Description: This course involves the theory and detailed demonstration of the first aid care of the injured. The student will learn to assess a victim's condition and incorporate proper treatment. Standard first aid, C.P.R. and AED certification(s) will be granted upon successful completion of requirements.

Materials Fee: \$27.00

Hours: 54 lecture

C-ID: KIN 101

Transferable: UC, CSU and private colleges; BC GE E

**PHED B39A Prevention and Care of Athletic Injuries**

3 units

Recommended: Successful completion of BIOL B32 and BIOL B33 with a grade of C or better and Recommended: BC placement into reading level 06 and writing level 06.

Description: 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. Field trip required.

Hours: 36 lecture, 54 lab

Transferable: UC, CSU and private colleges

**PHED B39B Advanced Athletic Training**

3 units

Recommended: Successful completion of BIOL B32 and BIOL B33 with a grade of C or better.

Description: 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. Field trips required.

Hours: 36 lecture, 54 lab

Transferable: UC, CSU and private colleges

**PHED B41 Recreation Leadership**

3 units

Description: 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.

Hours: 54 lecture

Transferable: CSU and private colleges.

**PHED B42 Introduction to Kinesiology**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: This course is an introduction to the interdisciplinary approach to the study of human movement. An overview of the importance of the sub-disciplines in kinesiology will be discussed along with career opportunities in the areas of teaching, coaching, allied health, and fitness professions.

C-ID: KIN 100

Hours: 54 lecture

Transferable: CSU and private colleges.

**PHED B50 Intercollegiate Conditioning**

1 unit

Description: Pre-season intercollegiate athletics. Enrollment is limited to athletic team candidates and includes, sport specific aerobic and anaerobic conditioning, drill technique, strength conditioning, speed development and game play. Students who repeat this course will improve skills and fitness through further instruction and practice.

Hours: 54 activity

Repeat: 3

Transferable: Not transferable. Not degree applicable.

**PHED B53 Intercollegiate Weight Training**

.5 – 2 units

Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.

Description: Intercollegiate athletics course emphasizing weight training. Enrollment is limited to athletic team candidates and includes, sport specific aerobic and anaerobic weight training, appropriate technique, strength conditioning, speed development and explosive exercises. Students who repeat this course will improve strength, flexibility, and fitness through detailed instruction and practice.

Hours: 27 – 108 activity

Not degree applicable. Not transferable.

## PHIL - Philosophy Courses

**PHIL B6A Introduction to Philosophy**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: A method, problems, multicultural and historical approach to philosophy. Epistemology (the study of knowledge), metaphysics (the study of reality), ethics (the study of morality), and philosophy of religion are covered from both traditional Western and non-Western sources.

Hours: 54 lecture

C-ID: PHIL 100

Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

**PHIL B7 Introduction to Logic**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Traditional basics of correct reasoning with an emphasis on their relationships to language, thought and argument.

Hours: 54 lecture

C-ID: PHIL 110

Transferable: UC, CSU and private colleges; CSU GE A.3;

BC GE B.2

**PHIL B9 Critical Thinking and Advanced Composition**

3 units

Prerequisites: Successful completion of ENGL B1A or equivalent with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: Development of critical thinking skills necessary for evaluating and formulating argumentative/ persuasive essays, and practice in applying those skills.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 1.B; CSU GE A.3; CSU GE C.2; BC GE B.2

**PHIL B10 Introduction to Ethics**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

C-ID: PHIL 120

Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

**PHIL B12 Ethics of Living and Dying**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: A philosophical yet practical approach to some of the major medical-ethical problems facing human beings today, such as: what patients should be told, the nature and importance of informed consent, the meaning and criteria for living, dying, and death including caring for the dying, and allowing to die, mercy 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.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; CSU GE C.2; CSU GE E; BC GE C.2

**PHIL B18 History of Ancient Philosophy**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: A survey of the development of Western philosophy from the Pre-Socratic 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.

Hours: 54 lecture

C-ID: PHIL 130

Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

### **PHIL B37 Introduction to World Religions**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: A survey of three Western religions - Judaism, Christianity, and Islam, and three Eastern Religions - Confucianism, Hinduism and Buddhism. Examines each religions 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.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

### **PHIL B100 Industry Ethics**

3 units

Prerequisites: Admission to Industrial Automation Bachelor's Degree program

Description: The main objective of this course is to stress analytical reasoning and emphasize clear thinking regarding the application of major ethical theories to specific workplace, organizational, and global business and technological issues that students are most likely to encounter once in the workforce. An examination of the responsibilities of the employee, manager, and organization within an industry context will take place, highlighting such issues such as whistleblowing, environment (e.g., asset disposal program), discrimination and harassment, risk, and safety. A key component of the class will also discuss the ethical importance of emerging technologies and their impact on society.

Hours: 54 lecture

Transferable: Bachelor's Degree Applicable

## **PHSC - Physical Science Courses**

### **PHSC B12 Physical Science**

4 units

Prerequisites: BC placement into math level 03 or successful completion of MATH B60 or equivalent with a grade of C or better.)

Recommended: BC placement into reading level 06.

Description: 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.

Hours: 54 lecture, 54 lab

C-ID: CHEM 140

Transferable: UC, CSU and private colleges; CSU GE B.1; CSU GE B.3; BC GE B.1

## **PHYS - Physics Courses**

### **PHYS B2A General Physics-Mechanics and Heat**

4 units

Prerequisites: BC placement into math level 04 or successful completion of MATH B70 or equivalent with a grade of C or better.

Corequisites: MATH B1A (may be taken concurrently)

Description: The properties of matter, mechanics and heat.

Emphasizes understanding laws, principles, and theories.

Required for most science, premedical, most other pre-professional and technical majors.

Hours: 54 lecture, 54 lab

C-ID: PHYS 105

Transferable: UC, CSU and private colleges; IGETC 5.A; IGETC 5.C; CSU GE B.1; CSU GE B.3; BC GE B.1

### **PHYS B2B General Physics-Sound, Light, Electricity, Magnetism, Modern Physics**

4 units

Prerequisites: BC placement into math level 06 or successful completion of Math B1B or equivalent and PHYS B2A or equivalent with a grade of C or better.

Description: The second in a 2-course algebra/trigonometry-based general physics sequence required of many science, pre-medical, and other pre-professional and technical majors. Includes electricity and magnetism, geometrical and physical optics, quantum physics, atomic physics, nuclear physics, and relativity. Emphasizes principles, laws, and problem solving.

Hours: 54 lecture, 54 lab

C-ID: PHYS 110

Transferable: UC, CSU and private colleges

### **PHYS B4A Mechanics and Wave Motion**

4 units

Prerequisites: Successful completion of MATH B6A or equivalent with a grade of C or better.

Recommended: BC placement into reading level 06 or and writing level 06.

Description: 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.

Hours: 54 lecture, 54 lab

C-ID: PHYS 205

Transferable: UC, CSU and private colleges; IGETC 5.A; IGETC 5.C; CSU GE B.1; CSU GE B.3; BC GE B.1

### **PHYS B4B Heat, Electricity, Magnetism**

4 units

Prerequisites: PHYS B4A and MATH B6B with grades of 'C' or better.

Recommended: Successful completion of MATH B6C with a grade of 'C' or better.

Description: Second of a three-course calculus-based physics sequence required of physics, engineering, and

other majors requiring a thorough physics background. Includes thermodynamics, electricity, magnetism, AC circuits, electromagnetic oscillations, and electromagnetic radiation. Emphasizes principles, laws and problem-solving.  
Hours: 54 lecture, 54 lab  
C-ID: PHYS 210  
Transferable: UC, CSU and private colleges

#### **PHYS B4c Optics and Modern Physics**

4 units  
Prerequisites: Successful completion of PHYS B4B or equivalent and MATH B6B or equivalent with grades of C or better.  
Description: Third of a three-course calculus-based physics sequence required of physics, engineering, and other majors requiring a thorough physics background. Includes geometric and physical optics, relativity, quantum physics, quantum mechanics, atomic and molecular physics, and nuclear physics. Emphasizes principles, laws, and problem solving.  
Hours: 54 lecture, 54 lab  
C-ID: PHYS 215  
Transferable: UC, CSU and private colleges

## **POLS - Political Science Courses**

#### **POLS B1 American Government: National, State and Local**

3 units  
Recommended: BC placement into reading level 06 and writing level 06.  
Description: A study of American government with emphasis on the national government. Includes a comprehensive analysis of governmental structure, functions, principles and problems. Includes analysis of California state and local governments. Partially satisfies the requirements in U.S. Constitution, American history and institutions and California state and local government.  
Hours: 54 lecture  
C-ID: POLS 110  
Transferable: UC, CSU and private colleges; IGETC 4.H; CSU GE D.8; BC GE D.2; BC GE D.3

#### **POLS B2 Comparative Government**

3 units  
Recommended: Successful completion of ENGL B50 with a grade of C or better, and BC placement into reading level 06.  
Description: 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 area or countries whose size and developing economics make them important, such as the People's Republic of China, Brazil, Mexico, Iran, India and Nigeria.  
Hours: 54 lecture  
C-ID: POLS 130  
Transferable: UC, CSU and private colleges; IGETC 4.H; CSU GE D.8; BC GE D.2

#### **POLS B3 International Politics**

3 units  
Recommended: BC placement into reading level 06.  
Description: Surveys the dynamics and ideologies of present-day international politics and rivalries. Development of the national state system and the evolution of the techniques and arts of diplomacy, and the causes of war.  
Hours: 54 lecture  
C-ID: POLS 140  
Transferable: UC, CSU and private colleges; IGETC 4.H; CSU GE D.8; BC GE D.2

#### **POLS B5 Current Issues/American Government**

1-2 units  
Recommended: BC placement into reading level 06 and writing level 06.  
Description: Study of special current events, such as elections, impeachment proceedings, public policies, or Constitutional revisions.  
Note: Offered only as such events occur.  
Hours: 18 lecture hours for each unit (18-36)  
Transferable: CSU and private colleges.

#### **POLS B12 Contemporary Issues in California State and Local Government**

3 units  
Recommended: BC placement into reading level 06 and writing level 06.  
Description: 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.  
Hours: 54 lecture  
Transferable: CSU and private colleges; CSU GE D.8; BC GE D.2; BC GE D.3

#### **POLS B16 Vital Political Problems**

3 units  
Recommended: BC placement into reading level 06 and writing level 06.  
Description: Examination of major political problems challenging the United States today. Emphasis on class discussion and individual analysis of controversial topics involving political policy in the context of the study of political science.  
Hours: 54 lecture  
Transferable: UC, CSU and private colleges; IGETC 4.G; IGETC 4.H; CSU GE D.8; BC GE D.2

## **PSYC - Psychology Courses**

#### **PSYC B1A General Psychology**

3 units  
Recommended: BC placement into reading level 06 and writing level 06.  
Description: 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.

Hours: 54 lecture

C-ID: PSY 110

Transferable: Transferable: UC, CSU and private colleges; IGETC 4.I; CSU GE D.9; CSU GE E; BC GE D.1; BC GE E

### **PSYC B1B Biological Psychology**

3 units

Prerequisite: PSYC B1A with a grade of 'C' or better.

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

C-ID: PSY 150

Transferable: UC, CSU and private colleges; IGETC 5.B; CSU GE B.2; BC GE B.1

### **PSYC B5 Elementary Statistics for the Behavioral and Social Sciences**

4 units

Prerequisites: BC placement into math level 04 or successful completion of MATH B65 or B70 or equivalent with a grade of C or better.

Description: Emphasis on the use of probability techniques, hypothesis testing, and predictive techniques to facilitate decision-making. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-square and t-tests; and application of technology for statistical analysis including the interpretation of the relevance of the statistical findings to various disciplines. Not open to students who have successfully completed BEHS B5.

Note: Not open to students who have successfully completed BEHS B5.

Hours: 72 lecture

C-ID: SOCI 125

Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4; BC GE B.2

### **PSYC B6 Research Methods for the Behavioral and Social Sciences**

4 units

Prerequisites: Successful completion of PSYC B1A and PSYC B5 or equivalent with a grade of C or better.

Description: 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.

Hours: 72 lecture

C-ID: PSY 200

Transferable: UC, CSU and private colleges; IGETC 4.I; CSU GE D.9; BC GE B.2

### **PSYC B20 Social Psychology**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Examines the effects of social influence 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.

Note: Not open to students who have successfully completed SOCI B20.

Hours: 54 lecture

C-ID: PSY 170

Transferable: UC, CSU and private colleges; IGETC 4.I; IGETC 4.J; CSU GE D.9; CSU GE D.10; BC GE D.1; BC GE D.2

### **PSYC B21 Special Projects in Psychology**

1 unit

Recommended: BC placement into reading level 06 and writing level 06.

Description: Development of psychological research and/or preparation for teaching within the psychological field. Focus is on empirical methodology and/or assistance with data entry, development and assessment.

Hours: 54 lab

Transferable: CSU and private colleges.

### **PSYC B30 Human Sexuality**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Emphasis on the biopsychosocial aspects of human sexuality from childhood to old age: Examination of the human sexual system, the sexual act, changing sexual attitudes and behavior, gender identity issues, sexual health, sexual orientation, sexual problems and their treatments, and sexual communication. Exploration of legal and ethical aspects of sexuality.

Hours: 54 lecture

C-ID: PSY 130

Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

### **PSYC B33 Psychology of Personal and Social Adjustment**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Emphasis on the biopsychosocial aspects of personal growth and adjustment: Examination of different psychological perspectives and theoretical foundations and how these are applied across a person's life taking into account the influence of culture, gender, ethnicity, historical, cohort, and social-economic status. A broad understanding of how scientists, clinicians, and practitioners study and apply psychology is emphasized.

Hours: 54 lecture

C-ID: PSY 115

Transferable: UC, CSU and private colleges; IGETC 4.I; CSU GE D.9; CSU GE E; BC GE D.1; BC GE E

**PSYC B40 Introduction to Lifespan Psychology**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Provides an overview, from a psychological perspective, of human development from conception through death, including biological and environmental influences. Biopsychosocial development and cognitive and physical changes are examined in light of historical and contemporary research and theory for the growing child, adolescent, and adult.

Hours: 54 lecture

C-ID: PSY 180

Transferable: UC, CSU and private colleges; IGETC 4.G; IGETC 4.I; CSU GE D.7; CSU GE D.9; CSU GE E; BC GE D.1

**PSYC B100 Industrial and Organizational Psychology**

3 units

Prerequisites: Admission to Industrial Automation Bachelor's Degree program

Description: The application of psychological principles and theories to the workplace: This includes an introduction to the methods, practices, research, and theories necessary to the scientific study of the attitudes and behaviors of employees and employers; interpersonal relationships in the workplace; the structure of organizations and organizational policies; the complex processes of motivation and leadership; individual and organizational performance; and the match between people and jobs.

Hours: 54 lecture

Transferable: Bachelor's Degree Applicable

## RADT - Radiologic Technology Courses

**RADT B1A Introduction to Radiologic Technology**

2 units

Prerequisites: BC placement into math level 04 or successful completion of MATH B70 or equivalent with a grade of C or better and admission to the Radiologic Technology Program.

Description: 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.

Hours: 36 lecture

Transferable: CSU and private colleges.

**RADT B1B Patient Care**

2 units

Prerequisites: Successful completion of BIOL B18 or equivalent with a grade of C or better and admission to the Radiologic Technology Program.

Description: 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.

Hours: 36 lecture

Transferable: CSU and private colleges.

**RADT B2A Radiographic Anatomy and Positioning 1**

3 units

Prerequisites: Successful completion of RADT B4A and RADT B1B.

Description: Instruction and lab practice in radiographic positioning of the chest, abdomen, lower and upper extremities, arthrography, bone surveys and bone densitometry with correlated imaging anatomy.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

**RADT B2B Radiographic Anatomy and Positioning 2**

3 units

Prerequisites: Successful completion of RADT B2A and RADT B3A and RADT B4B with a grade of C or better.

Description: Instruction and lab practice in radiographic positioning of the vertebral column, bony thorax, gastrointestinal, biliary and urinary systems with correlated film anatomy.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

**RADT B2C Radiographic Anatomy and Positioning 3**

3 units

Prerequisites: Completion of second summer session of Radiologic Technology Program.

Description: Instruction and lab practice in radiographic positioning of the head and skull with correlated film anatomy. Introduction to the principles of mammography, angiography and interventional imaging with correlated anatomy.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

**RADT B3A Radiographic Principles 1**

3 units

Prerequisites: Successful completion of RADT B1A with a grade of C or better.

Description: The principles of radiographic image production and acquisition including tube construction, exposure factors, beam restriction, grids, scatter radiation, image receptors, image processing, sensitometry and digital imaging will be discussed.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges. Degree applicable.

**RADT B3B Radiographic Principles 2**

3 units

Prerequisites: Successful completion of RADT B3A and RADT B12 with a grade of C or better.

Description: The principles of radiographic image production, acquisition and analysis including receptor exposure, contrast, spatial resolution, distortion, exposure control systems, mobile radiography, and fluoroscopy will be discussed.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

**RADT B4A Introduction to Clinical Education**

1.5 units

Prerequisites: Successful completion of BIOL B18 or BIOL B32 or BIOL B33 with a grade of C or better and acceptance to the Radiologic Technology Program.

Description: Introduction to clinical education includes job

shadowing and observation in patient transportation techniques, image processing, patient registration, equipment orientation, general patient care and safety.

Materials Fee: \$44.00

Hours: 81 lab

Transferable: CSU and private colleges.

### **RADT B4B Clinical Education 1**

4 units

Prerequisites: Successful completion of RADT B4A with a grade of C or better.

Description: Supervised clinical experiences are provided to develop skills in basic radiographic procedures. Fundamentals of anatomy, positioning and technical factors for imaging quality, radiation safety and protection.

Materials Fee: \$20.00

Hours: 240 lab

Transferable: CSU and private colleges.

### **RADT B5 Radiation Physics**

3 units

Prerequisites: Acceptance to the Radiologic Technology Program. Recommended: Prerequisites: BC placement into reading level 06.

Description: Fundamentals of physics, radiologic quantities and units, the atom, electromagnetic radiation, electricity and magnetism, x-ray equipment, x-ray production, filtration, x-ray interaction with matter, radiation protection and quality assurance.

Hours: 72 lecture, 18 lab

Transferable: CSU and private colleges.

### **RADT B6 Clinical Education 2**

5 units

Prerequisites: Successful completion of RADT B4B with a grade of C or better.

Description: Supervised clinical experiences 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 image quality are analyzed. Extension of radiographic procedures demonstrated in RADT B2A, RADT B2B.

Materials Fee: \$20.00

Hours: 18 lecture, 216 lab

Transferable: CSU and private colleges.

### **RADT B7 Clinical Education 3**

6.5 units

Prerequisites: Successful completion of RADT B2B and RADT B3B and RADT B6 with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: Supervised clinical experiences 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 image quality are analyzed. Extension of radiographic procedures demonstrated in RADT B2A, B2B.

Materials Fee: \$44.00

Hours: 18 lecture, 302 lab

Transferable: CSU and private colleges.

### **RADT B9A Sectional Anatomy for Medical Imaging**

3 units

Prerequisites: Acceptance into the radiologic technology

program.

Description: Sectional anatomy of the head, spine, thorax, abdomen and pelvis. Emphasis on computed tomography and magnetic resonance images and other imaging modalities using sectional anatomy.

Hours: 54 lecture

Transferable: CSU and private colleges.

### **RADT B10 Clinical Education 4**

7 units

Prerequisites: Successful completion of RADT B7 with a grade of C or better.

Description: 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.

Materials Fee: \$20.00

Hours: 18 lecture, 324 lab

Transferable: CSU and private colleges.

### **RADT B11 Radiographic Pathology**

2 units

Prerequisites: Successful completion of RADT B2C and RADT B5 and RADT B10 with a grade of C or better.

Description: Pathology and medical terminology pertinent to diagnostic medical imaging. Nature, causes, manifestations and treatment of disease. Imaging procedures utilized when making diagnosis.

Hours: 36 lecture

Transferable: CSU and private colleges.

### **RADT B12 Radiobiology and Radiation Protection**

2 units

Prerequisites: Successful completion of RADT B1A and B4A with a grade of C or better.

Description: Fundamental concepts of radiobiology including interactions of matter, biological effects on living cells and organ systems, radiation quantities and units, filtration, radiation monitoring, ALARA concepts and radiation protection for occupational and non-occupational populations. Review of current related California and Federal health and safety codes.

Hours: 36 lecture

Transferable: CSU and private colleges.

### **RADT B13 Clinical Education 5**

6.5 units

Prerequisites: Successful completion of RADT B10 with a grade of C or better.

Description: Supervised clinical experiences are provided to perfect skills in advanced radiographic procedures. Designed to prepare the student for program completion and certification examinations.

Materials Fee: \$20.00

Hours: 351 lab

Transferable: CSU and private colleges.

### **RADT B30 Principles of Venipuncture**

1 unit

Prerequisites: Current Cardiopulmonary Resuscitation, Healthcare Provider card.

Description: Basic instruction, practice and competency of venipuncture methods and procedures for the administration of contrast agents. Routes of administration, safety, basic



pharmacology, dosage calculations and emergency procedures. Course meets California Health and Safety Code, Section 106985, pertaining to Certified Radiologic Technologists performing venipuncture.  
Hours: 18 lecture  
Transferable: CSU and private colleges.

## SOCI - Sociology Courses

### **SOCI B1 Introduction to Sociology**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

C-ID: SOCI 110

Transferable: UC, CSU and private colleges; IGETC 4.J; CSU GE D.10; BC GE D.2

### **SOCI B2 Problems of Modern Society**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

C-ID: SOCI 115

Transferable: UC, CSU and private colleges; IGETC 4.J; CSU GE D.10; BC GE D.2

### **SOCI B20 Social Psychology**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Examines the effects of social influence on individual behavior: This includes 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. Not open to students who have successfully completed PSYC B20.

Hours: 54 lecture

C-ID: PSY 170

Transferable: UC, CSU and private colleges; IGETC 4.I; IGETC 4.J; CSU GE D.9; CSU GE D.10; BC GE D.1; BC GE D.2

### **SOCI B21 Special Projects/Sociology**

1 unit

Recommended: BC placement into reading level 06 and writing level 06 and completion of at least one introductory level sociology course or higher and instructor approval.

Description: 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.

Hours: 18 lecture

Transferable: CSU and private colleges.

### **SOCI B28 Introduction to Gender**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Sociological analysis of the social construction of masculinity and femininity historically and cross-culturally. It examines the debate on sex and gender and analyzes the impact of economic and political change on gender expectation and practices. It focuses macro-analyses on how institutions shape gender and micro-analyses on how individuals are socialized and how they practice gender.

Hours: 54 lecture

C-ID: SOCI 140

Transferable: UC, CSU and private colleges; IGETC 4.D; CSU GE D.3; CSU GE D.4; CSU GE D.10; CSU GE E; BC GE D.2

### **SOCI B36 Sociology of the Chicano**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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. Not open to students who have taken the equivalent course, CHST B36.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 4.C; IGETC 4.J; CSU GE D.3; CSU GE D.10; BC GE D.2

### **SOCI B45 Minority Relations**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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. Not open to students who have taken the equivalent course, HMSV B45.

Hours: 54 lecture

C-ID: SOCI 150

Transferable: UC, CSU and private colleges; IGETC 4.C; IGETC 4.J; CSU GE D.3; CSU GE D.10; BC GE D.2

## SOIL - Soil Science Courses

### SOIL B1 Introduction to Soil Science

3 units

Recommended: BC placement into reading level 06, writing level 06, and math level 03.

Description: 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.

Hours: 36 lecture, 54 lab

Transferable: UC, CSU and private colleges; BC GE B.1

## SPAN - Spanish Courses

### SPAN B1 Elementary Spanish I

4 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Introduction to Spanish language and culture by means of a program that involves video, audio, and print media in an integrated method of planned immersion. Students will develop language skills that include reading, writing, listening comprehension and oral production.

Note: Not open to students who have taken the equivalent course, SPAN B1AB.

Hours: 72 lecture

C-ID: SPAN 100

Transferable: UC, CSU and private colleges; IGETC 6.A; CSU GE C.2; BC GE C.1; BC GE C.2

### SPAN B2 Elementary Spanish II

4 units

Prerequisites: Successful completion of SPAN B1 or equivalent with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: This course continues using the "planned immersion approach" begun in SPAN B1. 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.

Note: Not open to who have taken the equivalent course, SPAN B2AB.

Hours: 72 lecture

C-ID: SPAN 110

Transferable: UC, CSU and private colleges; IGETC 6.A; CSU GE C.2; BC GE C.2

### SPAN B3 Intermediate Spanish I

4 units

Prerequisites: Successful completion of SPAN B2 or SPAN B2AB or equivalent with a grade of C or better or Native Speaker.

Recommended: BC placement into reading level 06.

Description: 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.

Note: Not open to students who have successfully completed

SPAN B35.

Hours: 72 lecture

C-ID: SPAN 200

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 6.A; CSU GE C.2; BC GE C.2

### SPAN B4 Intermediate Spanish II

4 units

Prerequisites: Successful completion of SPAN B3 or SPAN B35 or equivalent with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: 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. Note: Not open to students who taken the equivalent course, SPAN B36.

Hours: 72 lecture

C-ID: SPAN 210

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 6.A; CSU GE C.2; BC GE C.2

### SPAN B35 Spanish for Heritage Speakers I

4 units

Recommended: Heritage speaker or near heritage speaker abilities and skills.

Description: 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.

Note: Not open to students who taken the equivalent course, SPAN B3.

Hours: 72 lecture

C-ID: SPAN 220

Transferable: UC, CSU and private colleges; IGETC 6.A; CSU GE C.2; BC GE C.2

### SPAN B36 Spanish for Heritage Speakers II

4 units

Prerequisite: SPAN B35 with a grade of 'C' or better.

Description: This course is a continuation of Spanish B35 and is designed for students whose native language is Spanish but need to improve their academic skills in the language. This course will focus on advanced grammar concepts, subjunctive tenses, sequence of tenses, extensive writing and reading. The writing and reading skills will be strengthened as well as vocabulary building. The course is taught entirely in Spanish.

Note: Not open to students who taken the equivalent course, SPAN B4, or who have taken SPAN B10.

Hours: 72 lecture

C-ID: SPAN 230

Transferable: UC, CSU and private colleges; IGETC 6.A; CSU GE C.2

## SPST - Special Studies Courses

### SPST B48 Special Studies: Honors

0.5-2 units

Description: 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 designed according to the subject field's studies. Field trips may be required.

Hours: 9 lecture hours for .5 unit (9-36)

Transferable: CSU and private colleges.

#### **SPST B49 Special Studies: Honors**

0.5-2 units

Description: 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 designed according to the subject field studies, i.e. Special Studies/German. Field trips may be required.

Hours: 9 hours for .5 unit (24-96)

Transferable: CSU and private colleges

#### **SPST B49L Special Studies Lab: Honors**

1-2 units

Description: Seminars and/or individual conference by arrangement. Independent, individual study planning 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. Field trips may be required.

Hours: 54 hours for 1 unit (54-108)

Transferable: CSU and private colleges

#### **SPST B201 Special Projects and Studies**

1-3 units

Description: Special projects of studies in an area not being served by regularly scheduled courses. Students are required to meet periodically with a faculty advisor to review progress in the study program. Field trips may be required.

Hours: 18 lecture hours for unit (18-54)

Transferable: Not transferable. Not degree applicable.

#### **SPST B201L Special Projects and Studies**

1-3 units

Description: 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. Maximum 6 units. Field trips may be required.

Hours: 54 hours for 1 unit (54-162)

Transferable: Not transferable. Not degree applicable.

## **STDV - Student Development Courses**

#### **STDV B1 Educational Planning**

1 unit

Description: The course introduces college survival skills and issues, including college expectations, a student's responsibility for education, college resources, and academic policies. This course is designed to assist students in discussing strategies

for choosing a major and/or career and to help them in making educational plans based on their individual career goal. AA/AS Associate's Degree applicable.

Hours: 18 lecture

Transferable: CSU and private colleges.

#### **STDV B2 Lifelong Learning and Career Planning**

2 units

Description: This survey course is designed to increase academic motivation and career success throughout the lifespan. In particular, students will learn to examine how an individual's psychological, social, and environmental factors impact academic, career and personal life choices. Through this exploration, students will apply these topics as they relate to their personal and professional self-development and to the discovery of many new options for improving all aspects of their lives. The historical view of careers, current career trends, and employment outlook will be studied. Various methods of researching academic and career opportunities will be explored to assist students. Satisfies the 0.5 educational planning graduation requirement for Bakersfield College.

Hours: 36 lecture

Transferable: CSU and private colleges.

#### **STDV B3 Career, Life, and Educational Planning**

3 units

Description: This course guides students through a decision-making process that will help them envision and plan for a future that is productive, achievable, and stimulating. The culmination of this process is the development of a career and educational plan that will create a pathway for students to reach their career and academic goals. Critical thinking skills will be utilized through a systematic approach to career development by examining values, interests, skills, life roles, personality types, personal self-management, decision-making and goal-setting throughout the life span. Satisfies the 0.5 unit educational planning requirement for graduation from Bakersfield College.

Hours: 54 lecture

Transferable: CSU and private colleges; CSU GE E

#### **STDV B6 Tools for College Success**

3 units

Description: Integrates personal growth, learning techniques, academic and career success, problem solving, critical, and creative thinking. The course focuses on the following topics: self-evaluation and assessment, goal setting, career decision making, educational planning, time and financial management techniques, instructor-student relationships, cultural diversity, stress management, campus resources, learning styles and strategies including lecture note-taking, test taking, memory and concentration. Satisfies 0.5 unit educational planning requirement for graduation from Bakersfield College.

Hours: 54 lecture

Transferable: CSU and private colleges; CSU GE E; BC GE E

## TECM - Technical Mathematics Courses

### TECM B52 Industrial Math and Quality Control

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Elementary course in mathematics commonly used in industry. Topics covered include a review of arithmetic, percentages, elementary algebra, and geometric forms. Students will also be introduced to precision measurement and the application of statistical quality control (SQC) in industry.

Hours: 54 lecture

Transferable: Not transferable. Not degree applicable.

## THEA - Theatre Arts Courses

### THEA B1 Introduction to Acting

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Designed for either theatre majors, or, non-majors. Emphasizes mastery of self as the key to creative process of communication and performance through improvisation, theatre games, concentration, pantomime, etc.

Hours: 54 lecture

C-ID: THTR 151

Transferable: UC, CSU and private colleges; CSU GE C.1; BC GE C.1

### THEA B2A Elements of Acting

3 units

Prerequisites: Successful completion of THEA B1 or equivalent with a grade of C or better or by audition.

Recommended: BC placement into reading level 06.

Description: This course is an exploration of theories and techniques used in preparation for the interpretation of drama through acting. The emphasis will be placed on deepening the understanding of the acting process as it relates to scripted materials such as monologues, scenes and full plays.

Hours: 54 lecture

C-ID: THTR 152 (For taking both THEA B2A and THEA B2B)

Transferable: UC, CSU and private colleges; CSU GE C.1; BC GE C.1

### THEA B2B Elements of Acting

3 units

Prerequisites: Successful completion of THEA B1 and THEA B2A or equivalent with a grade of C or better or by audition.

Recommended: BC placement into reading level 06.

Description: This course is an exploration of theories and techniques used in preparation for the interpretation of drama through acting. The emphasis will be placed on deepening the understanding of the acting process through scripted materials such as plays, scenes, and monologues.

Hours: 54 lecture

C-ID: THTR 152 (For taking both THEA B2A and THEA B2B)

Transferable: UC, CSU and private colleges; CSU GE C.1; BC GE C.1

### THEA B12A Introduction to Shakespeare

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Examination of Shakespeare's use of verse and prose, imagery, language, developing style, themes, and character development as applied to production concerns. Emphasis is the reading of four representative plays.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1;

BC GE C.1

### THEA B14 Introduction to Stage Costume

3 units

Description: Students will study costume history, design, and basic construction techniques as an introduction to basic theatrical costuming. Fabrics and their various uses will be investigated.

C-ID: THTR 174

Hours: 54 lecture

Transferable: UC, CSU and private colleges

### THEA B16 Stagecraft

3 units

Description: Basic set construction, scenic painting, construction materials, stage properties, tools and equipment, special effects, lighting and sound, stage management.

Hours: 54 lecture

C-ID: THTR 171

Transferable: UC, CSU and private colleges

### THEA B20 Introduction to Theatre

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: 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.

Hours: 54 lecture

C-ID: THTR 111

Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

### THEA B27 Acting Theatre Lab

1-3 units

Prerequisites: Audition required.

Recommended: BC placement into reading level 06.

Description: The rehearsal and production of both main stage and experimental theatre dramas. Theatre activity for the beginner or expert in acting.

Hours: 54 hours for 1 unit (54-162)

Repeat: 3

C-ID: THTR 191

Transferable: UC, CSU and private colleges; BC GE C.1

### THEA B28 Technical Theatre Lab

1 unit

Recommended: BC placement into reading level 06 and writing level 06.

Description: Participation in set construction, lighting, makeup, costume, properties, or any other technical area of theatrical productions.

Hours: 54 lab

Repeat: 3

C-ID: THTR 192

Transferable: CSU and private colleges.

### **THEA B31 Introduction to Film Studies**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Designed to give the student a heightened awareness and appreciation of films through viewing, discussing and writing about them. The critical viewing and discussion of film will provide the basis for the development of aesthetic appreciation.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1;

BC GE C.1

### **THEA B32 Contemporary Film Studies**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Designed to give the student a heightened awareness and appreciation of genre film categories through viewing various genre films, discussing and writing about them.

Hours: 54 lecture

Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1;

BC GE C.1

## **VNRS - Vocational Nursing Courses**

### **VNRS B67 Principles of Pharmacology**

2 units

Corequisites: VNRS B68 and VNRS B69 and VNRS B69L and appropriate standing in the Vocational Nursing Program.

Description: This course is designed to prepare the vocational nurse to function safely when administering medication. Using the nursing process as the framework, concepts of pharmacology, calculations, and nursing considerations that pertain to the safe administration of medication are presented.

Hours: 36 lecture

Transferable: Not transferable. Degree applicable.

### **VNRS B68 Basic Medical Surgical Nursing Practice**

3 units

Corequisites: VNRS B67 and VNRS B69 and VNRS B69L and appropriate standing in the Vocational Nursing Program.

Description: This Vocational Nursing theory course focuses on the application of the nursing process in common health/illness situations. Using the nursing process as a framework, emphasis is placed on the role of the vocational nurse as a provider of care in assisting the adult and geriatric patient with chronic disorders affecting the GI, GU endocrine, integumentary systems. Topics in basic nutrition are also presented including an overview of basic nutrients, basic therapeutic diets, and patient education specific to chronic conditions. Basic mental health concepts are introduced. Concepts in this course are correlated with the clinical settings presented in Foundations for Vocational Nursing Practice Lab.

Hours: 54 lecture

Transferable: Not transferable. Degree applicable.

### **VNRS B69 Foundations for Vocational Nursing Practice**

3 units

Corequisites: VNRS B67 and VNRS B68 and VNRS B69L and appropriate standing in the Vocational Nursing Program.

Description: This Vocational Nursing course begins with an introduction to the roles of the vocational nurse and provides a foundation of basic nursing arts and sciences necessary for the practice of nursing including concepts specific to the gerontological client. Using the nursing process as a framework, concepts of professionalism, growth and development, safety, and health concerns for the adult and geriatric population are discussed. Legal and ethical considerations, cultural diversity, the nursing process, and basic data collection are included as theory topics along with the presentation of basic mental health concepts applicable to the geriatric client. Fundamental nursing skills are discussed in detail with concurrent hands-on practice of skills.

Hours: 54 lecture

Transferable: Not transferable. Degree applicable.

### **VNRS B69L Foundations for Vocational Nursing Practice Lab**

6 units

Corequisites: VNRS B67 and VNRS B68 and VNRS B69 and appropriate standing in the Vocational Nursing Program.

Description: This Vocational Nursing lab course focuses on the provider of care role of the vocational nurse in assisting the adult and geriatric patient to meet essential activities of daily living. A beginning knowledge of nursing techniques and medication administration with an understanding of the principles, rationales, and procedures for each technique is emphasized. Using the nursing process as a framework, students will provide basic care for adult and geriatric patients with various uncomplicated diseases and disorders who require nursing intervention to meet basic human needs. Basic communication techniques for the adult and geriatric client with mental health disorders are integrated throughout. This clinical course includes experiences primarily in long term care clinical settings.

Materials Fee: \$24.00

Hours: 324 lab

Transferable: Not transferable. Degree applicable.

### **VNRS B79 Intermediate Medical Surgical Nursing**

9 units

Prerequisites: Appropriate Standing in the Vocational Nursing Program and concurrent enrollment in VNRS B79L.

Description: This Vocational Nursing theory course uses the nursing process as a framework to guide the development of critical thinking skills used to determine nursing actions for adult and geriatric patients with cancer and conditions affecting the cardiovascular, lymphatic, musculoskeletal, endocrine, and respiratory system. The role of the vocational nurse as a provider of care and manager of care related to leadership, supervision, and rehabilitation are also discussed. Care of the medical surgical patient with mental health disorders will be integrated. Concepts in this course will be correlated in the various lab settings presented in VNRS B79L (Intermediate Medical Surgical Lab).

Hours: 162 lecture

Transferable: Not transferable. Degree applicable.

**VNRS B79L Intermediate Medical Surgical Nursing Lab**

6 units

Prerequisites: Appropriate Standing in the Vocational Nursing Program and concurrent enrollment in VNRS B79.

Description: This Vocational Nursing lab course concentrates on the application of the nursing process and the continued development of the manager and provider of care roles for adult medical-surgical patients from various cultural and social backgrounds. Clinical experiences build on the basics of the first semester as students perform more advanced skills when providing nursing care to patients. Incorporated into the course is the utilization of intermediate assessment, planning, intervention and evaluation under clinical supervision. This clinical course includes acute care and rehabilitation settings which correlate with the topics presented in VNRS B79 (Intermediate Medical Surgical).

Materials Fee: \$24.00

Hours: 324 lab

Transferable: Not transferable. Degree applicable.

**VNRS B83 Critical Thinking and Leadership for the Vocational Nurse**

1.5 units

Prerequisite: Appropriate standing in the Vocational Nursing Program.

Corequisite: VNRS B89L

Description: This Vocational Nursing theory course will focus on the concepts of critical thinking skills and clinical reasoning strategies utilizing a case study approach. Leadership skills, capabilities, and knowledge essential to the vocational nurse including roles and responsibilities, application of the nursing process to problem solving methods, and supervision and evaluation of the effectiveness and quality of care are discussed. Managerial traits, styles, roles, and models are also explored. Critical thinking skills and utilization of the nursing process in clinical decision-making will be presented and correlated to the lab setting in VNRS 89L (Advanced Medical Surgical Nursing Lab).

Hours: 27 lecture

Transferable: Not transferable. Degree applicable.

**VNRS B84 Maternal Child Pharmacology**

1 unit

Prerequisite: Appropriate standing in the Vocational Nursing Program.

Corequisite: VNRS B88L

Description: This Vocational Nursing theory course will reinforce and emphasize the basic principles of pharmacology and calculations necessary for safe and effective medication administration. The primary focus is on the pharmacology content and variables that influence drug therapy when caring for the child bearing family and the pediatric patient. Utilization of the pharmacological principles from this course will occur in the maternal/child clinical lab course (VNRS B88L Maternal/Child Nursing Lab).

Hours: 18 lecture

Transferable: Not transferable. Degree applicable.

**VNRS B88 Maternal Child Nursing**

3 units

Prerequisite: Appropriate standing in the Vocational Nursing Program.

Corequisite: VNRS B88L

Description: This Vocational Nursing theory course provides an overview of contemporary family-centered childbirth and a

foundation for pediatric nursing using growth and development concepts as a framework for presenting health problems and special concerns of the pediatric client. This course focuses on the provider and manager of care role for the vocational nurse in assisting families experiencing common health/illness situations associated with their age group. Using the nursing process and developmental theory as a framework, topics and nursing responsibilities for the normal aspects of the child-bearing family and the pediatric client will be discussed. The course concepts will be correlated with the lab setting in VNRS B88L (Maternal/Child Nursing lab).

Hours: 54 lecture

Transferable: Not transferable. Degree applicable.

**VNRS B88L Maternal Child Nursing Lab**

3 units

Prerequisite: Appropriate standing in the Vocational Nursing Program.

Corequisite: VNRS B88

Description: This Vocational Nursing lab course is correlated with the corresponding Maternal/Child Theory course in the Vocational Nursing Program. Using the nursing process and developmental theory as a framework to guide the plan of care, students will provide care for the childbearing family and the pediatric client. This lab course focuses on the advanced application of the nursing process in the care of multiple patients from various ethnic and social backgrounds. Clinical experiences will provide opportunities for the demonstration of leadership skills, capabilities, and knowledge essential to the role of the vocational nurse as a member of the health-care team and supervisor of other vocational nurses and unlicensed health care givers. This clinical course includes setting in acute care, clinics, and Physician offices for obstetric and pediatric patients. Clinical content correlates with VNRS B88 (Maternal/Child Nursing).

Hours: 162 lab

Transferable: Not transferable. Degree applicable.

**VNRS B89 Advanced Medical Surgical Nursing**

3.5 units

Prerequisite: Appropriate standing in the Vocational Nursing Program.

Corequisite: VNRS B89L

Description: Using the nursing process as a framework, this Vocational Nursing theory course reinforces the critical thinking skills necessary to care for adult and geriatric patients with acute and complex medical surgical disease states, including multi-system involvement. The care for the patient with increasingly complex mental health conditions will be explored. Role expectations related to being a member of the profession are also discussed. Knowledge of nursing principles and leadership/management techniques to determine and prioritize nursing actions will be correlated with the lab setting presented in VNRS 89L (Advanced Medical Surgical Nursing Lab).

Hours: 63 lecture

Transferable: Not transferable. Degree applicable.

**VNRS B89L Advanced Medical Surgical Nursing Lab**

3 units

Prerequisite: Appropriate standing in the Vocational Nursing Program.

Corequisite: VNRS B89

Description: This Vocational Nursing lab course focuses on the advanced application of the nursing process in the care of multiple patients from various ethnic and social backgrounds.

Clinical experiences will provide opportunities for the demonstration of leadership skills, capabilities, and knowledge essential to the role of the vocational nurse as a member of the health-care team and supervisor of other vocational nurses and unlicensed health care givers. Application of critical thinking skills and the utilization of the nursing process in clinical decision making will be assessed. Students will provide care for patients with acute medical surgical illness and families experiencing common health/illness situations. This clinical course includes acute and sub-acute settings which correlate with topics in VNRS 89 (Advanced Medical Surgical Nursing) and VNRS B83 (Critical Thinking and Leadership for the vocational Nurse).  
Materials Fee: \$24.00  
Hours: 162 lab  
Transferable: Not transferable. Degree applicable.

## WELD - Welding Courses

### WELD B1A Introduction to Oxygen Acetylene Welding and Cutting

2 units  
Recommended: BC placement into reading level 06.  
Description: Properties and characteristics of metals. Safety, theory, and practical experience in oxy-acetylene welding, cutting, and joint design, codes and weld testing.  
Materials Fee: \$30.00 for project materials.  
Hours: 27 lecture, 27 lab  
Transferable: CSU and private colleges. Degree applicable.

### WELD B1B Introduction to the Welding Processes

2 units  
Recommended: BC placement into reading level 06.  
Description: Properties and characteristics of metals and a survey of metal welding processes. Safety, theory, and practical experience in shielded metal arc, PAC, MIG, TIG, FCAW, Shear & Brake, joint design, codes and weld testing.  
Materials Fee: \$30.00 will apply towards steel, welding rods, and welding resume for industry AWS certification.  
Hours: 27 lecture, 27 lab  
Transferable: CSU and private colleges. Degree applicable.

### WELD B48WE Occupational Work Experience Education

1-8 units  
Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.  
Description: College credit for Welding related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 hours per semester unit of paid work experience; 60 hours per semester unit of volunteer work experience. Repetition allowed per Title 5 55253.  
Hours: Non-paid 60 hours for each 1 unit (60-480). Paid 75 hours for each 1 unit (75-600).  
Transferable: Not transferable.

### WELD B53A Shielded Metal Arc Welding

2 units  
Recommended: BC placement into reading level 06.  
Description: Basic arc welding theory and manipulative skills

related to the shielded metal arc welding process, including welding in all positions with various electrodes.  
Materials Fee: \$30.00  
Hours: 27 lecture, 27 lab  
Transferable: Not transferable. Degree applicable.

### WELD B53B Shielded Metal Arc Welding 2

2 units  
Recommended: Successful completion of WELD B1A and WELD B1B with a grade of C or better and BC placement into reading level 06.  
Description: Basic arc welding theory and manipulative skills related to the shielded metal arc welding process, including welding in all positions with various electrodes.  
Materials Fee: \$30.00  
Hours: 27 lecture, 27 lab  
Transferable: Not transferable. Degree applicable.

### WELD B54A Blueprint Reading for Welders and Machinists

3 units  
Recommended: BC placement into reading level 06.  
Description: 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.  
Hours: 54 lecture  
Transferable: Not transferable. Degree applicable.

### WELD B54B Template Development and Layout for the Welder

3 units  
Recommended: BC placement into reading level 06.  
Description: Technical skills and critical thinking in layout techniques including layout situations, mathematical and pipe fitting terminology used in the industry.  
Hours: 54 lecture  
Transferable: Not transferable. Degree applicable.

### WELD B55A Structural Plate Certification I

2 units  
Prerequisites: Successful completion of WELD B53A or WELD B74A with a grade of C or better.  
Recommended: BC placement into reading level 06.  
Description: Safety, introduction to welding codes, welding discontinuities and practical welding. Experience on plate with SMAW or FCAW, based on the American Welding Society DI. 1 structural code. Weld 3/8" plate in 1G, 2G, 3G, & 4G fixed position for certification.  
Materials Fee: \$30.00  
Hours: 27 lecture, 27 lab  
Transferable: Not transferable. Degree applicable.

### WELD B55B Structural Plate Certification II

2 units  
Prerequisites: Successful completion of WELD B53A or WELD B74A or equivalent with a grade of C or better.  
Recommended: BC placement into reading level 06.  
Description: Safety, introduction to welding codes, welding discontinuities and practical welding. Experience on plate with SMAW or FCAW, based on the American Welding Society DI. 1 structural code. Weld 1" plate in 1G, 2G, 3G, & 4G fixed position for certification.  
Materials Fee: \$30.00  
Hours: 27 lecture, 27 lab  
Transferable: Not transferable. Degree applicable.

**WELD B55C ASME Pipe Certification**

2 units

Prerequisites: Successful completion of WELD B55A or WELD B55B or equivalent with a grade of C or better or evaluation of students' welding skills and knowledge equivalent to WELD B55A or WELD B55B.

Description: Safety, welding pipe in the 5G rolled, 5G fixed and 6G fixed positions. An examination of the ASME Welding Code will also be covered.

Hours: 27 lecture, 27 lab

Transferable: Not transferable. Degree applicable.

**WELD B55D ASME Pipe Certification**

2 units

Prerequisites: Successful completion of WELD B55A or WELD B55B or equivalent with a grade of C or better or evaluation of students' skills and knowledge equivalent to WELD B55A and WELD B55B.

Description: Safety, welding pipe in the 5G rolled, 5G fixed, and 6G fixed positions. An examination of the ASME Welding Code will also be covered. 5G rolled, 5G fixed, and 6G fixed positions. An examination of the ASME Welding Code will also be covered.

Materials Fee: \$30.00

Hours: 27 lecture, 27 lab

Transferable: Not transferable. Degree applicable.

**WELD B55E API and Related Certification Testing**

2 units

Prerequisites Successful completion of WELD B55C or WELD B55D or equivalent with a grade of C or better or evaluation of students' skills and knowledge equivalent to WELD B55C and WELD B55D.

Recommended: BC placement into reading level 06.

Description: Safety, and welding pipe in 5G rolled, 5G fixed and 6G fixed positions. The API 1104 pipe welding code will also be covered. This course prepares students for certification testing.

Materials Fee: \$30.00

Hours: 27 lecture, 27 lab

Transferable: Not transferable. Degree applicable.

**WELD B55F API and Related Certification Testing**

2 units

Prerequisites: Successful completion of WELD B55C and WELD B55D or equivalent with a grade of C or better or evaluation of student's welding skills and knowledge equivalent to WELD B55C and WELD B55D.

Recommended: BC placement into reading level 06.

Description: Welding safety, and welding pipe in the 5G rolled, 5G fixed, and 6G positions. The API 1104 pipe welding code will also be covered.

Materials Fee: \$30.00

Hours: 27 lecture, 27 lab

Transferable: Not transferable. Degree applicable.

**WELD B65AB Welded Steel Structures**

3 units

Recommended: Previous class or experience in GMAW (Gas Metal Arc Welding), and BC placement into reading level 06.

Description: 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. (This course is equivalent to combined WELD 65A

and 65B).

Materials Fee: \$55.00

Hours: 27 lecture, 81 lab

Transferable: Not transferable. Degree applicable.

**WELD B74A Introduction to GMAW (Gas Metal Arc Welding) and FCAW (Flux Core Arc Welding)**

2 units

Recommended: Successful completion of WELD B1B or WELD B53A with a grade of C or better, or one year work experience as a welder and BC placement into reading level 06.

Description: Theory and application of GMAW (Gas, Metal Arc Welding) and FCAW (Flux Core Arc Welding) welding processes. Emphasizes safe and proper operation of these welding processes while welding on mild steel.

Hours: 27 lecture, 27 lab

Transferable: Not transferable. Degree applicable.

**WELD B74B Introduction to Gas Tungsten Arc Welding**

2 units

Recommended: Successful completion of WELD B1B or WELD B53A with a grade of C or better, or one year work experience as a welder and BC placement into reading level 06.

Description: Theory and application of GTAW (Gas Tungsten Arc Welding) welding processes. Emphasizes safe and proper operation of this welding process while welding on mild steel, aluminum, and stainless steel.

Note: Not open to students who have taken WELD B74AB.

Materials Fee: \$30.00 will apply towards steel, welding rods, and welding resume for industry AWS certification.

Hours: 27 lecture, 27 lab

Transferable: Not transferable. Degree applicable.

## WEXP - Work Experience Courses

Registration Instructions: The Work Experience Program offers variable unit classes. Students desiring to enroll in a Work Experience class must go online to the Bakersfield College website, select Program and Classes, click on Work Experience and begin the application process. The six (6) step process must be completed to ensure enrollment in the course. It is the responsibility of the student to complete all the steps in the application process. For more information, please contact the Work Experience Office at 661/395-4580.

**WEXP B248 Occupational Work Experience Education - Paid**  
1-8 units

Prerequisites: Declared major or occupational goal and evaluation by Work Experience department of student's qualifications and objectives.

Description: College credit for learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational cooperative work experience credit may accrue at the rate of one to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit earned. Repetition allowed per Title 5, §55253.

Hours: Paid 75 hours per unit (75 – 600)

Transferable: CSU and private colleges.



**WEXP B248 Occupational Work Experience Education- Unpaid**

1-8 units

Prerequisites: Declared major or occupational goal and evaluation by Work Experience department of student's qualifications and objectives

Description: College credit for learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational cooperative work experience credit may accrue at the rate of one to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit earned. Repetition allowed per Title 5, §55253.

Hours: Unpaid 60 hours per unit (60 – 480)

Transferable: CSU and private colleges.

**WEXP B250 General Work Experience Education - Paid**

1-3 units

Prerequisites: (a) Pursue a planned work experience program, (b) concurrent enrollment in seven or more units (including GWE units) except summer school, (c) evaluation by Work Experience department of students planned work experience program, qualifications and objectives.

Description: 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.

Hours: Paid 75 hours per unit (75 – 225)

Transferable: Not transferable. Degree applicable.

**WEXP B250 General Work Experience Education - Unpaid**

1-3 units

Prerequisites: (a) Pursue a planned work experience program, (b) concurrent enrollment in seven or more units (including GWE units) except summer school, (c) evaluation by Work Experience department of students planned work experience program, qualifications and objectives.

Description: 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.

Hours: Unpaid 60 hours per unit (60 – 180)

Repeat: None

Transferable: Not transferable. Degree applicable.

## WOOD - Woodworking Courses

**WOOD B1 Introduction to Woodworking Technologies**

3 units

Description: 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 eight week segment of the semester.

Materials Fee: \$45.00 to cover cost of expendable materials (abrasives, adhesives, millwork items, etc.)

Hours: 27 lecture, 81 lab

Transferable: CSU and private colleges.

**WOOD B2 Furniture and Cabinetmaking**

3 units

Recommended: BC placement into reading level 06.

Description: 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.

Materials Fee: \$45.00 to cover the cost of materials for the required student projects.

Hours: 27 lecture, 81 lab

Transferable: CSU and private colleges.

**WOOD B5 Intermediate Cabinetmaking**

3 units

Recommended: Successful completion of WOOD B2 with a grade of C or better, or evaluation by instructor of students woodworking skill sets.

Description: 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.

Materials Fee: \$45.00 for lumber, hardware (if applicable), and finishing products, etc.

Hours: 27 lecture, 81 lab

Transferable: CSU and private colleges.

**WOOD B65A Advanced Cabinetmaking**

3 units

Prerequisites: WOOD B5 with a grade of 'C' or better, or evaluation by instructor of students woodworking/ cabinetmaking skill sets.

Description: 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.

Materials Fee: \$45.00 for project materials (glue, hardware, dowels, biscuits, and finishing products. Excludes lumber).

Hours: 27 lecture, 81 lab

Transferable: Not transferable. Degree applicable.

**WOOD B65B Advanced Cabinetmaking**

3 units

Prerequisites: Successful completion of WOOD B65a or equivalent with a grade of C or better.

Description: 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 wainscot, bookcases, desks, bars, doors, skylights and windows demonstrated. Also included are commercial applications such as store fixtures, counters and reception desks.

Hours: 27 lecture, 81 lab

Transferable: Not transferable. Degree applicable.

# WTRT - Water Treatment Courses

## **WTRT B51 Basic Water Treatment**

3 units

Description: 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 lecture

Transferable: Not transferable. Not degree applicable.

## **WTRT B52 Basic Water Distribution**

3 units

Description: 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 lecture

Transferable: Not transferable. Not degree applicable.

## **WTRT B53 Water and Wastewater Analysis**

3 units

Recommended: BC placement into reading level 06, and high school chemistry or job related experience.

Description: 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.

Hours: 54 lecture

Transferable: Not transferable. Not degree applicable.

## **WTRT B61 Advanced Water Treatment**

3 units

Prerequisites: Successful completion of Basic H<sub>2</sub>O treatment or comparable course.

Description: 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. Field trips required.

Hours: 54 lecture

Transferable: Not transferable. Not degree applicable.

## **WTRT B62 Advanced Water Distribution**

3 units

Prerequisites: Must have completed a basic water distribution course acceptable to Bakersfield College or the instructor, with a minimum of 36 hours.

Description: 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.

Hours: 54 lecture

Transferable: Not transferable. Not degree applicable.